

THE BREAKTHROUGH ISSUE

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TRIATHLON MAGAZINE

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## 17 QUICK FIXES

TO GO FASTER

## SWIM EASY

Tough skills  
made simple

## DON'T BE THAT TRIATHLETE

The biggest mistake that  
even the pros make **PAGE 24**

## FAST OFF THE BIKE

TRAIN YOUR BRAIN  
DURING THESE  
RUN WORKOUTS

AERO-TESTED  
**SPEED  
SECRETS**

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**DAVE MIRRA**  
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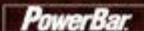
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# LDS #1 TRIATHLON MAGAZINE



# AUG 15

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### 17 REASONS YOU'RE NOT GETTING FASTER

Experts weigh in on the small things you're neglecting that could give you a boost on race day.

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BY JENÉ SHAW

MATT HARBICHT



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Dave Mirra was photographed  
by John David Becker in  
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## IN MY SWIM BAG

Three-time Ironman world champion Mirinda "Rinny" Carfrae shares the gear she takes to every swim workout.

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## TAKE A MID-SEASON BREAK

Find out why taking some time away from swim, bike and run could be the best thing you can do for a stronger, happier season.

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How long does it take to recover from a 70.3? How should I set time goals for my next race? What run workouts should I be including in my schedule? Get the answers to these questions and more in our "Dear Coach" section.

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▼ LUKE MCKENZIE



# NO SHORT CUTS

—  
Swim, bike, run. Three words.  
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# HEAD + HEART



## THIS MONTH'S ISSUE, THEMED AROUND HELPING YOU ACHIEVE A BREAKTHROUGH IN TRIATHLON,

is packed with proven strategies for finding your performance edge. Senior editor Jené Shaw was permitted rare access to aerodynamic testing with some of the sport's top pros with the singular goal of translating those findings for the benefit of the age-group triathlete. We're all looking for ways to work a little smarter, and the full day of testing at the LA velodrome revealed some super useful conclusions,

which Shaw outlines on page 72 in "Your Aero Edge."

We've also rounded up common pitfalls triathletes struggle with—despite our best intentions. Check out our "17 Reasons You're Not Getting Faster" on page 64 and see if your current swim-bike-run performance ceiling can be shattered with a few simple fixes. In addition to these two feature stories, you'll find our ongoing offering of SBR tips and tactics from the experts.

But we also appreciate the undisputed fact that this sport requires a healthy amount of mental fortitude in addition to any training savvy. Both the head and the heart are at play, and you can't find sustainable success in this sport without relying equally on both. So we also wanted to introduce you to a triathlete whose story, we hope, will encourage you to examine your own motivations and purpose in this sport and remind you to appreciate your individual strengths and struggles—to think about what the finish line represents to you. Megan Beer is a triathlete and mom to a special-needs son, Adam, in Minnesota. Adam loves to race beside his mom. But because he's blind, non-verbal

and autistic, Megan tethers Adam to her in a kayak, tugging him through the swim. Then she carries him through transition, pulls him in a bike trailer for the ride, then transfers him to a jogging stroller to complete the run. I saw a photo of her carrying her 90-pound boy through transition, his arms and legs wrapped tightly around his mom, and it rearranged my molecules.

You don't have to be a parent to appreciate Megan's story, told beautifully by Susan Lacke, on page 80. This triathlete family is one of countless stories that illustrate the tremendous meaning that can be gleaned through this sport, this lifestyle.

This past May, I went to The Woodlands to report on Ironman Texas and cheered until my throat hurt as Mike Reilly shouted, "You are an Ironman!" into the dog-tired, stunned faces of athletes in utter disbelief about what they'd just accomplished. The midnight finish there and in Kona are two of the most life-affirming scenes I've ever witnessed. And they're powerful reminders that we can prepare our bodies to carry us to the finish line, but it is pure gumption that brings us home.

Julia Beeson Polloreno, Editor-in-Chief  
 @JuliaPolloreno

## THE HILLS ARE ALIVE ...

... With the sound of triathletes swimming, biking and running through the heart of the Austrian Alps come Aug. 29, date of the 2015 Ironman 70.3 World Championship. Check Triathlete.com for my race-week dispatches from storybook scenic Zell Am See-Kaprun, Austria!



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listen to while  
running?

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Pop music is my guilty pleasure and dominates my running playlist. I always download a few new songs before long runs to serve as an extra little motivation.

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I prefer to run without music—helps me stay more in tune with the workout.

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### MIXED MESSAGES

Triathlon has always supported various medical causes, e.g., ALS, multiple sclerosis, Crohn's disease. I suffer with a muscle disease secondary to the flu vaccine. Before treatment, I could barely get out of bed; with treatment, I can run 100 yards before I have to walk. I am glad that I can still participate in this sport because it gives me a sense of overcoming this disease.

I read in the feature "Coming Clean" [June 2015 issue] that my treatment is a prohibited drug. However, I do not feel "unclean" or [as if I'm] "doping" or "cheating." I feel lucky and blessed that my treatment allows me to continue in this sport.

The article was way too superficial and one-sided. You would do a service to your readers by more fully elucidating common prescription medications (insulin? Diabetics cannot race?) and over-the-counter medicines that are prohibited. There is a medical exemption option for people like me. You failed to mention this in your article. You should review the steps that we need to take to obtain an exemption. USAT, WTC and WADA should disabuse sick athletes of their fears that requesting an exemption will lead to a suspension from competing.

It would be disingenuous for the triathlon community to promote various [illness-related causes] and then penalize sick athletes who come clean about their doctor-prescribed medications.

—NAME WITHHELD, ATLANTA, GA.

*A sidebar on therapeutic use exemptions was cut for space from the original article. It appears here. —Editor*

*If an athlete has a legitimate medical need to take a substance on the WADA prohibited list, he can apply for a "therapeutic use exemption," or TUE. The application, found at Usada.org, requires a physician's explanation of the athlete's diagnosis and why the medication is required. The application is thorough, with the TUE Committee requiring enough medical documentation to establish the athlete's diagnosis and if treatment plans are correct. If alternative, approved treatments for your medical condition(s) are available, you must provide documentation of a failed trial of those alternatives before being allowed a TUE of a banned substance. If this documentation is not provided,*

*the application will be returned to the athlete without further review by the TUE Committee.*

### THE OTHER BALANCE ISSUE

I appreciated the piece "Strength in (Equal) Numbers" [June 2015 Editor's Note]. Ironman should definitely allow equal access to pro women triathletes, no question. Excuse me for naming the other elephant in the room: This is a primarily white sport with very little diversity by way of race, and it's not being talked about. The issue is too easily dismissed. This glorious sport should reflect the pluralistic communities we live in. We can easily name a variety of factors—the very expensive nature of triathlon will come to the top of the list—but that's certainly not the only predictor. Representation matters. I flip through the ads and articles of any triathlon magazine and 99 percent of the figures represented are white. How about an article on Latino, African-American, Arab and Asian athletes' accomplishments as age-groupers or elites? We should challenge all triathlon-related companies to invest in diversity by creating scholarships, donating gear, featuring (and sponsoring) athletes of color in ads. USAT recently gave the Oakland Tri Club a \$5,000 grant to start a program training under-privileged youth. I've heard that clubs in Chicago and D.C. have similar programs. That's certainly a small step to address the bigger issue. This will have to be a long-term effort if we want to create equity in the sport. This is a beautiful sport that can change lives, but if its value is only to affluent white folks, that value is certainly diminished.

—KARIM BAER, OAKLAND, CALIF.

### QUOTA IN QUESTION

Strength in numbers seems to be an argument that I am completely in the middle on. Here is a position that may offer a different but fair alternative: Rather than increase the number of slots for women, why not take the elite men's numbers down to the equivalent 35 and offer the 15 slots that have been opened up to men or women, age-group or elite, based on results at qualifying events? Surely there will be elite women and age-groupers that may earn a slot over the elite men that would have otherwise qualified. If not, the quota was fair to begin with.

—TIM LEECH, LAKE FOREST, CALIF.



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# FIRST WAVE

German pro Faris Al-Sultan rides through The Woodlands, Texas, during the Ironman North American Championship. He dropped out in T2 and announced the day after the race that it was his last Ironman. The 2005 Ironman world champion, known for racing in Speedo-style bottoms, placed in the top 10 at the Ironman World Championship nine times during his 18-year career and was a fan favorite. But a lengthening list of injuries and moderate race results helped make the decision for him. "Yesterday I realized, 'OK, I've had so many bad races, and I can't stand having one more bad race,'" Al-Sultan told Bob Babbitt in a post-race interview. "I'm happy with what I've accomplished."

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# check in

TRIBE / PRO PANEL / GEAR UP / TRAIN SMART / TRIATHLIFE



The 35th running of the iconic Escape from Alcatraz Triathlon saw a dramatic finish to the men's professional race, when Alcatraz rookie Eric Lagerstrom, an ITU athlete, outsprinted six-time Alcatraz winner Andy Potts just 50 yards from the finish. ITU standout Ashleigh Gentle won the women's race with just a 15-second margin of victory over runner-up Lauren Goss.

PHOTOGRAPH BY ROCKY ARROYO

# IT'S EASY BEING GREEN

Though triathlon is a potentially eco-friendly sport—an hour on the bike is always better than one spent in a car—it isn't completely green. From paper cups on the roads to plastic goody bags stuffed with dozens of flyers doomed for the garbage, races produce a significant amount of waste. In response, many race directors have made a concerted effort to reduce the carbon footprint of their events.



## Pittsburgh Triathlon

Environmental education is key for the sprint and international events organized by water conservation group Friends of the Riverfront. In addition to eliminating paper registration forms, the annual event gifts its athletes with recyclable swag bags containing eco-friendly race memorabilia (and zero paper).

## Deuces Wild Triathlon Festival

The weekend-long festival of racing, featuring half-iron, Olympic, youth, and Xterra competitions, takes place in the pristine forest setting of Show Low, Ariz. Race organizer TriSports uses the event to enhance awareness of waste-reduction strategies at

every turn. In addition to reducing landfill waste by 200 percent since 2009, the race partners with the town's sanitary district to compost all food waste, plates, napkins, utensils, cups, paper and cardboard generated by the event.

## Transamerica Chicago Triathlon

As one of the largest triathlons in the world (more than 9,000 participants participate in super sprint-, sprint- and international-distance events), the event strives to be at the forefront of sustain-

ability by sourcing local food and beverages, donating unused food to charity and recycling all qualified materials (including discarded swim caps).

## Portland Triathlon

In keeping with the city's green reputation, this Olympic and sprint triathlon creates necessary infrastructure, such as swim buoys and bike racks, from recycled or used materials. Participants are given incentives for carpooling, utilizing public transportation, or riding their bikes to the race.

—SUSAN LACKE

### NEWBIE TIP

## RUN OFF THE BIKE.

Triathlon is most likely to be won or lost on the run. After a training ride, immediately head out for an easy 20-minute recovery run (combined, this is called a "brick" workout). Your body will get used to the feeling when transitioning off the bike, and your legs will respond better on race day. Aim for a weekly brick workout.

clever gear  
**ALERT**

## BEAST MODE

Does your pup leave a little something to be desired in the run buddy department, suddenly jerking toward squirrels and telephone poles? Ours too. But we found the solution: **Iron**

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(\$43-\$48, [Irontoggy.com](http://Irontoggy.com)) are belted bungee leashes that absorb the shock of sudden pulling (215 pounds of breaking strength) and put the brunt of the pulling onto your hips instead of your arms. They're designed for running with larger (aka stronger) dogs who aren't perfectly trained, and we were impressed by the clever details such as a sliding snap buckle so the whole belt isn't rotating as your dog switches directions, and the multiple handles and hold-knots on the leash to help direct your dog. It's available in two lengths—the Runner's Choice is adjustable for 30–54 inches, and the SideKick is 37 inches, perfect for keeping your dog next to your. Now, we're just waiting for someone to invent a solution for getting rid of a doggie dooey bag 2 miles into a trail run. —BETHANY LEACH MAVIS



SEEK AND YOU SHALL FIND  
YOUR PLACE IN THE UNIVERSE.

*Michelle Collins*

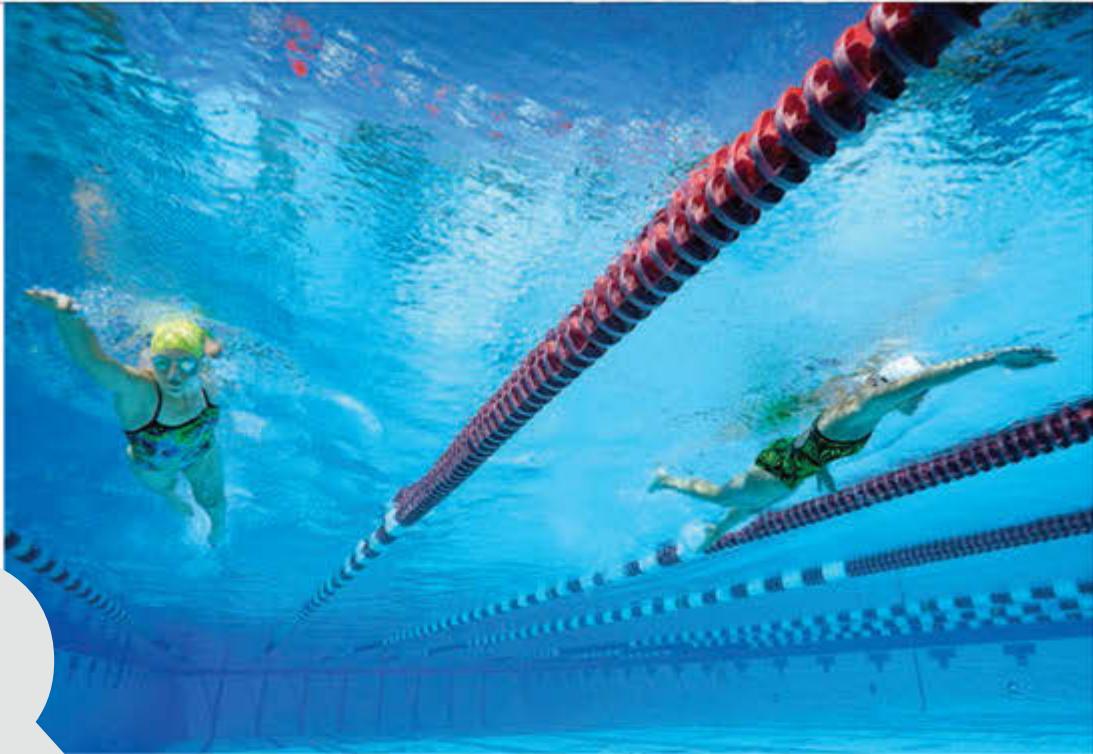


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## MY INJURY HAS KEPT ME FROM RUNNING. WHAT'S THE BEST APPROACH FOR TURNING MY LEMONS INTO LEMONADE?

**A:** First, throw a big pity party! All jokes aside, it is a necessary step in the process. Set a limit though—48 hours, and then it's time to buck up and get to work on these steps.

**Assess your injury, then your upcoming races.** After receiving a diagnosis from the appropriate doctor or health professional, get a sense of the recovery time needed. For upcoming races, how long have you not been running and what is a realistic timeline to start again? Don't rush it. Listen to when your body is ready versus when your mind is.

**Take stock.** Why did this occur? Body imbalances? Training regimen? There is generally a root cause—find it and go from there.

To help find it, I highly recommend *Ready to Run* by Dr. Kelly Starrett. Even if you are not injured, this book is a gem. We all have imbalances, and this will help you find yours and then strengthen it. Create a new habit of daily mobility so when you are ready to run, you are stronger, balanced and “bullet-proof.” Make it happen.

**Set goals during your “non-running phase.”**

**Swim:** If you swim Masters three times a week, try four or five days. Move up a lane and hang on as long as you can. If you don't swim Masters, give it a try. Or commit to increasing your yardage by 35 percent. Make it hard and challenge yourself. Having a numerical goal helps with focus.

**Bike:** Ride Saturday, Sunday and mid-week. If you ride with power, set a goal to raise your FTP in 4 weeks. Or if you ride the same loop each week, try to do it fast-

er. Or use this run respite as a “bike block” opportunity and try to ride X miles in 14 days. Ride as much as you can and get as strong as you can.

Raising your swim and bike fitness will keep you focused. When you are ready to run, you will have made gains in both sports while also maintaining aerobic fitness. Strength and mobility will help prevent future injuries.

Smile and try not to be angry when you see people running—you will get there soon enough!

*Julie Dunkle is owner of San Diego-based Coach2Compete, a certified triathlon and swim coach and a nine-time Ironman finisher with 3 dogs, 2 kids and 1 husband.*



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## MED TENT

# SHOULDERING THROUGH

Don't let shoulder bursitis, a swimming overuse injury that often accompanies an impingement or rotator cuff strain, keep you out of the pool.

BY JORDAN D. METZL, M.D.

**SHOULDER BURSITIS (TECHNICALLY subacromial bursitis)** is marked by a raw, burning pain at the front or side of the shoulder. Loss of motion in the shoulder can also be a symptom of bursitis. The pain increases with overhead activities such as throwing or swimming, and the pain may also increase if you lean on your elbow.

Bursae are fluid-filled shock absorbers located between a bone and a muscle, tendon or skin. In the shoulder's case, the subacromial bursa interacts with the rotator cuff and the surrounding bones, especially the acromion, which is part of the scapula (shoulder blade).

The bursa in this area can become irritated and cause pain. It's common for subacromial bursitis to accompany shoulder impingement or rotator cuff strain, but it can have a variety of causes. The most typical ones for athletes are rotator cuff weakness, shoulder instability, a shoulder impact and overuse, especially in overhead sports like baseball, tennis, swimming and volleyball.

## FIX IT

**See a doctor.** The shoulder is a complex and important joint, so see a sports doc at the first sign of shoulder pain.

**Employ dynamic rest.** Lay off the upper-body work (including swimming), and use lower-body workouts to maintain fitness.

**Ice it.** Ice applied to the shoulder for 15 minutes several times a day can help reduce inflammation.

**Try an NSAID.** An anti-inflammatory like ibuprofen or naproxen can help with the pain.

**Start rehabbing.** As the pain improves, do some rotator cuff exercises to help strengthen your shoulder. Here are two.

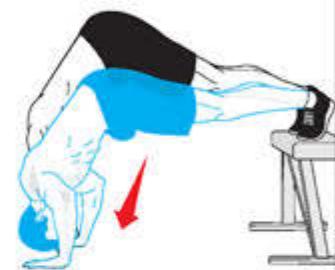
## PREVENT IT

**Work the shoulder both ways.** Having a strong, balanced shoulder is the best injury-prevention strategy—strong muscles take the strain off tendons, cartilage, bones and of course bursae. Even better here: The muscles in and around the shoulder respond well



## ▼ INVERTED SHOULDER PRESS

Assume a pushup position, but place your feet on a bench or chair and push your hips up so that your torso is nearly perpendicular to the floor. Your hands should be slightly wider than your shoulders, and your arms should be straight. Without changing your body posture, lower your body until your head nearly touches the floor. Pause, then return to the starting position by pushing your body back up until your arms are straight.



## SHOULDER SQUEEZE #1

Lie facedown on an exercise bench. Hold your arms out to your sides parallel to the floor, bent at 90 degrees with your thumbs pointing toward the ceiling. Now try to raise your elbows toward the ceiling and feel your shoulder blades squeezing together. Hold for a moment and return to the starting position. Do 10 to 20 reps depending on your strength.

## SHOULDER SQUEEZE #2

While lying facedown on the bench, hold your arms along your sides with your palms up. Keeping your arms straight, lift your palms toward the ceiling, again feeling your shoulder blades squeeze together. Hold for a moment and return to the starting position. Again, do 10 to 20 reps.

to exercise. Shoulder work must be a staple of your upper-body workouts, and you must work opposing muscle groups to avoid an imbalance. That means, for example, that if you do a pushing exercise (such as bench presses or overhead presses), you need to do an equivalent amount of a pulling movement (like rowing or pullups). Also, add in some rotator cuff exercises like the ones above.

**Swimmers, improve your mechanics.** Learning proper technique straight out of the gate is the best way to start. If you're already a dedicated water rat, a good swim coach can spot and correct any mechanical flaws you have that could cause injury.



New York City sports medicine specialist Jordan D. Metzl, M.D. is a 29-time marathon finisher and 10-time Ironman. His book, *The Athlete's Book of Home Remedies*, has more than 1,000 tips to fix all types of injuries and medical conditions.



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# YOU'RE NOT CROWIE

When preparing for an Ironman, following a pro's example isn't always the best idea.

BY TIM DEBOOM



I WONDER IF SOMEONE WATCHING MY CAREER, when I was still racing professionally, ever said, "What an idiot!" I'm sure they did, because increasingly, I find myself saying the same thing about the professional athletes racing today. I suppose this indicates that I have truly become that washed-up "old fogey" about to spout off with the cliché, "Back in my day ..."

I just can't help but wonder what is going through many of the professional triathletes' minds today when they are planning their race schedule. When did it become common practice to race a 70.3-distance race two to four weeks before a full iron-distance race?

Do they really expect to race well at the 70.3, recover and then perform their best at the iron-distance race too? Do all the professionals today just train that much harder, recover that much quicker, and are simply that much tougher than the athletes from my generation and before? I really don't think so, because actually pulling off two great races that close together is a very rare feat.

It used to be the norm that when an athlete was preparing for an iron-distance race, they would put in a solid six to eight weeks of training. Around five to six weeks out, they would *possibly* race an Olympic-distance event simply as part of their speed training.

Sure there are the anomalies. Craig "Crowie" Alexander had some amazing performances with short windows between races. However, this is CROWIE

I'm talking about—one of the greatest ever. There are others too—Leanda Cave, Sebastian Kienle and plenty of Brett Sutton's athletes, but many of these pros are on the planned fast track to success followed by burnout. Most don't intend to have 15- to 20-year careers so they can gamble big. Still, why do most pros today think they can pull off the same coup?

Possibly, it's simply because they see other pros do it, and think it is the secret to performing well at the second race. If you are thinking, "Well, Craig did it, so can I." My response to you is this: "You're not Craig. No one is."

They may also think they need a key workout like a 70.3 to be ready for a full a couple weeks later. From my experience, four weeks out from an iron-distance race was always my biggest and most important training. Two weeks out, I was in the middle of my taper recovering from said training. No way did a half-iron-distance race fit into that equation. The physical toll of a half-Ironman is definitely not appreciated by the pros today. It's not an Olympic-distance race—half-Ironmans actually require recovery!

The Kona Points Ranking (KPR) system has definitely changed the way athletes set up their schedules too. Possibly,

they feel by stacking races like this, they have a better chance to earn points from one training block. This is a flawed plan because, most likely, they will only perform decently at one of the races. The training for a 70.3 and a full Ironman are very different and not interchangeable. I have to think performing poorly, or at best average, at two races is worse than focusing on that one great race result. Even with the chase for points, it is still possible to schedule a season that allows plenty of time between races. Then they can actually train for both distances instead of compromising both.

My big fear for all of this has nothing to do with the professionals. If they want to over-race, perform poorly, shorten their careers and end up injured by stacking races, that's fine. However, I worry that the age-groupers will follow their lead and think this is a good way to plan their seasons too. Don't! This is definitely not one of the times to "do what the pros do." Plan a season with a couple of peaks and plenty of time for training, taper and recovery afterward.

But what do I know? Now that my career is over, I think I can hear all the youngsters telling me I don't know what I'm talking about. ■

*Tim DeBoom is the 2001 and 2002 winner of the Ironman World Championship, and the last American to win in Kona.*

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Finding a place for all the nutrition needed for long-course racing can be tricky, and although this won't store a sandwich (it fits a couple gels), this storage compartment is a welcome addition. An included band helps keep things in place, but we recommend an extra rubber band for security.



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## with PAUL MATTHEWS

Pro triathlete Paul "Barny" Matthews has been racing triathlon since age 11 in his native Australia, where he quickly rose through the Australian Triathlon Junior ranks. Now based in Boulder, Colo., he stepped up to long-course triathlon a few years ago, when he finished the 2012 Ironman Asia-Pacific Championship in Melbourne in 8:05:58, the second fastest Ironman debut. Barny's time between workouts is spent very differently these days: He and his wife, Hillary, welcomed their daughter, Emerson, into the world in December, two months after Barny finished 14th at the Ironman World Championship. He gave us a peek at his gear essentials.



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**4** ADIDAS ADIZERO ADIOS BOOST 2.0 *(\$145, Adidas.com)* "I love my new running shoes."

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**10** ALEX FERGUSON: *MY AUTOBIOGRAPHY* *(\$15, Amazon.com)* "The book I'm reading right now about the former Manchester United Football Club manager, even though I'm a Liverpool supporter!"

**11** FUELBELT HELIUM H2O *(\$50, Fuelbelt.com)* "For Ironman, you always need to stay hydrated."

**12** AQUA SPHERE P2K PULL BUOY *(\$20, Aquasphereswim.com)*

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# JEKYLL ISLAND, GEORGIA

This quiet, pristine barrier island in southeast Georgia makes for a peaceful training escape or a fun family-friendly getaway. **BY JENÉ SHAW**



## GO

In May for the Turtle Crawl Triathlon and NestFest weekend, or between Memorial Day and Labor Day for the best weather.

## FLY

To Jacksonville, Fla. (an hour away) or Savannah, Ga. (90 minutes away).

## STAY

The brand-new (April 2015) Westin Jekyll Island is located at the center of the Turtle Crawl Triathlon festivities, and the hotel caters to athletes with a special recovery meals menu, fresh juice, ice baths upon request, New Balance gear rental and a run concierge who will take you on a group run or show you where to go (rates around \$200 per night, [Westinjekyllisland.com](http://Westinjekyllisland.com)).

## turtle power

### NEST FEST

Georgia's coastal southeast is well known for its sea turtle population, and Jekyll is home to one of the nation's few sea turtle research and rehabilitation centers. Every year, nesting season is launched during [Nest Fest](#) (which coincides with the Turtle Crawl Triathlon, see "Race It!"), a day full of live music and activities that culminates with a celebration where sea turtles are



released back into the ocean. This year, 16 turtles were sent back to their natural habitat. You can also visit the turtle "hospital" while on the island.

## drifting away

### DRIFTWOOD BEACH

Like something straight out of a Tim Burton movie, Driftwood Beach is strewn with massive trees that look like a Petrified Forest washed ashore. It's definitely the most Instagram-able site on the island.

## tee time

### PLAY (CHEAP) GOLF

Because Jekyll is a state park, the four golf courses only charge a municipal rate of \$40 or less for 18 holes, and the courses are diverse and free of homes or distractions—outside of the local deer and osprey, of course.



## entertain the kids

### FUN FOR THE FAMILY

There are 20 miles of bike paths around the island, so the whole family can rent bikes for a leisurely ride by the water and through the oak tree tunnels. And what kid doesn't love a water park? Summer Waves has a wave pool, high-speed slides and a lazy river.



## RACE IT!

The Turtle Crawl Triathlon ([JekyllIsland.com](http://JekyllIsland.com)) is the same weekend as Nest Fest every May, with a sprint and international triathlon and 5K on the same morning. This year, a combined 800 participants took part in the three events, giving it a relaxed, local race vibe. The ocean swim can be a little choppy, but outside of that, you can look forward to pancake-flat roads that will aid in some super fast bike and run splits. The finish line area features a post-race beer tent, frozen yogurt and a Westin recovery area with massage therapists, foam rollers and chocolate milk. The finisher's medal—in the shape of a turtle, naturally—is one you'll want to display as a fun race/trip memento.



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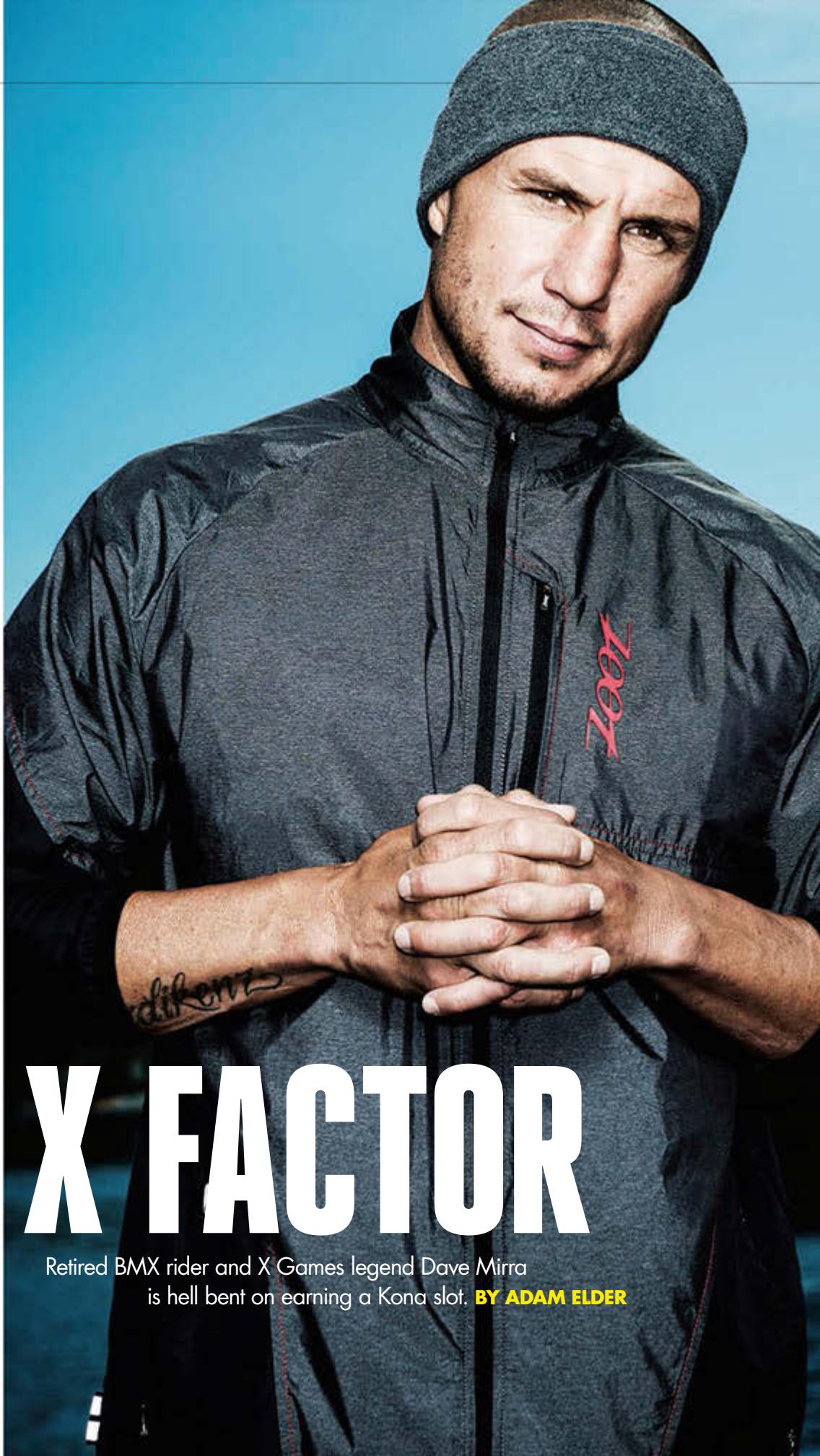
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Triathlon has a history of attracting sporting greats who've recently retired from their day job. But few have taken to multisport and generated quite a buzz like Dave Mirra. ¶ The X Games superstar who became a household name with his BMX skills on a vert ramp is now a full-fledged triathlete who earned a spot at last year's Ironman 70.3 World Championship in Mont-Tremblant, Canada, after being in the sport for less than two years.



# THE X FACTOR

Retired BMX rider and X Games legend Dave Mirra is hell bent on earning a Kona slot. **BY ADAM ELDER**

Mirra's "aha" moment came after beginning to ride road bikes casually after retiring from the vert ramp in 2011. He was at Ironman Lake Placid in 2013, watching a friend competing in the race. "When the cannon went off, I got a little teary-eyed, going, 'Wow, this is for real,'" Mirra says. "All these people—different sizes, shapes, styles, goals and reasons for racing—worked so hard. And I thought, 'Man, this is cool.'"

He hadn't swum much and wasn't a serious runner, but after that, his friend's coach put a power meter on his bike. Then, back home in North Carolina, he started to run and took swim lessons. Soon after he entered a race, Bayshore 70.4 in Long Beach, Calif., and loved it. Later that year he experienced Kona for the first time, as a spectator—and returned for more in 2014, staying in the Cervélo house and soaking up the Big Island's ambiance.

Now, his goal in 2015 is to qualify for triathlon's grandest event—Kona. To do that, he's taking on Ironman Lake Placid, in addition to several 70.3 races.

Mirra is currently coached by Cliff English, also coach to Heather Jackson, Liz Lyles, and other pros, and has also received support from industry-leading brands like Cervélo, Zoot and Enve.

"Dave has a lot of enthusiasm for the sport, for learning and for working hard," says English, who has been advising Mirra since late 2014. "He reminds me of Simon Whitfield, who always impressed me as a very intuitive and kinesthetically aware athlete. Dave is similar, and no doubt very predisposed to acquiring

*"I NEEDED AN OUTLET TO WORK HARD AT SOMETHING, AND TRIATHLON WAS JUST THE PERFECT SPORT AT THE PERFECT TIME. ... I NEVER THOUGHT I'D BE RUNNING EVERY DAY AND LOOK FORWARD TO IT. THAT'S WHAT'S RAD: TRIATHLON TOTALLY CHANGED THE WAY I LOOK AT SPORTS THAT I USED TO NEVER WANT TO DO."*

skills rapidly given his achievements in BMX. He is very passionate to learn, and once he starts to visualize something he really gets some momentum started in his quest to own that skill."

As dedicated as he is to the training, Mirra also has fun with it. His video on Instagram (@davemirra) of him bunny-hopping a tri bike on an indoor roller went viral. (He remains coy about riding it on a vert ramp but says he might one day.)

After spending most of his life on two wheels, it's no surprise that the bike is his strongest discipline in triathlon. But action sports have taken a toll on Mirra's body; he has no posterior collateral ligaments (PCLs) in his knees, after tearing both of them back in the early '90s, which forces him to focus hard on his run technique. And he's dislocated his shoulders numerous times from falls.

Whether or not there's a direct correlation between BMX vert riding and road cycling, Mirra took to the tri bike naturally, and loves it. "All those years, all I wanted to do was go as high as I could," Mirra says. "Now I just want to stay low to the ground and see how fast I can go."

And he's not the only one in his family who's embraced triathlon. His two

daughters, 7 and 8 years old, are also triathletes.

If there's one common link between action sports and endurance sports, it's the dedication to constant practice. And it's what Mirra seems to enjoy most about triathlon.

"When I was really young, even if it was 90 degrees and humid, I would ride nine hours on a vert ramp," he says. "Going to the bathroom and eating lunch were an inconvenience, and I didn't like it. It interrupted me."

He talks similarly about his new favorite sport.

"I love the consistency, the intensity, the accountability [of triathlon]," Mirra says. "If you don't train, you're not gonna show up at a race and get lucky. Every day there's a goal."

So it's easy to see why, for former pro athletes used to intense dedication, triathlon is a natural second act, however unlikely it would have seemed during their playing career.

"I needed an outlet to work hard at something, and triathlon was just the perfect sport at the perfect time," Mirra says. "I never thought I'd be running every day and look forward to it. That's what's rad: Triathlon totally changed the way I look at sports that I used to never want to do." ■





# FALLING IN LOVE AGAIN

Keeping the flame burning for triathlon can be tough, especially after a big race.

BY MEREDITH ATWOOD

**A**bout four months after my first Ironman, I had a call with my coach, Brett, to talk about nothing in particular and everything in general. I'm sure he enjoyed talking to Debbie Downer, my new persona. Swim, bike, bummer. Swim, bike, buzzkill. I was not to be trusted with people in public. I bailed on girls' nights out with friends. I refused to respond to most everyone's texts—for entirely too long. I was trying so hard to engage in my life, but it just was not really turning out so well for me. I was burned out. »



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And actually, I don't think I was alone. Regularly, I still see many posts on social media to the effect of "I have no motivation" and "I've signed up for this Ironman and I don't know why." After talking with my coach, it seemed to be a common theme with us triathletes. Beginners are awesome because they have high levels of motivational mojo ("I love this sport! Bring it!"). But that initial love affair is tough to maintain. After a handful of seasons, especially when a string of them might involve big beasts like a half- or full Ironman, the "why am I doing this again?" rumblings tends to start to run through our heads.

Actually, the "why" is a valuable question to ask.

When the motivational well feels completely dry, how do we find the strength to bother with this sport? What puts us back on that trainer at 5:30 in the morning? What laces up those running shoes when we swear that one more run will do us in? Motivation for the sake of motivation is hard to come by.

Falling in love with the sport again—how do you do it?

After my first long-distance race, it took me five months to find the love again, which got me thinking—five months is exactly how long it took my firstborn to sleep more than four hours at a time. The exhaustion, the joy, the pain, the happiness—the parenting roller coaster—so much like Ironman.

Which in hindsight, I think that is why Ironman is so hard. Yes, *Ironman is just hard. Duh.* But long-distance racing is an unfamiliar process that involves much crying (me) and whining (everyone else *and* me), and relief when it's finally over. Sometimes the original, sweet joy of the "why" behind triathlon can be lost.

I had told Coach Brett after Ironman, "Do not put me back on the bike. I do not want to see my bike ever again." He spent many hours with me on the phone, talking through my burnout and external stresses. Finally, he said something that clicked: "Find the reason you loved triathlon in the first place. Get back out there and figure it out. Because going forward without the love—that's not worth it." Ah-ha.

So I spent some time looking back

**BEGINNERS ARE AWESOME BECAUSE THEY HAVE HIGH LEVELS OF MOTIVATIONAL MOJO, BUT THAT INITIAL LOVE AFFAIR IS TOUGH TO MAINTAIN.**

on it. I took a family trip. I ran on the beach three times without a workout in my plan—just hit the sand and ran and looked at the ocean and remembered why I loved running, triathlon. Those welcome-back runs were not easy. I had gained 20 pounds since the big race, but I was able to remember, in those runs, the *reason* behind triathlon (not necessarily *Ironman*—that one was still too close). I was able to remember that triathlon meant freedom. And sense of self, stress management and, above all, joy. All wrapped up into one sport.

The next day, I woke up at 5 a.m. I wanted to get on the bike. I wanted to run. *What happened?* We have to show up and say, "I'm here." It's the same way we must show up to the workout and say, "Count me in. Here we go." It's a matter of putting on your shoes and just going, all zombie-like, to the treadmill and doing the run, and dragging oneself to the shower afterward. Getting through the workouts is sometimes all you can do. Then eventually, one day, you wake up and say, "Hey! I am back! Look at me!" That's often how it happens for me. It's all about getting the momentum going and keeping the good streaks rolling on. Consistency is such a huge part of finding the love again. When I was training for my first half-Ironman, I rarely missed any workout. I was slow and plodding, but I ticked off workouts and was consistent as I could be. That was a wonderful time in my triathlon newbie life. I could measure the progress, see the changes—all because of my consistency.

With consistency comes a stirring—a sort of summoning of the love—and as your motivational mojo begins to rise, you'll return to the reasons you took on the sport in the first place. ■

*Meredith Atwood is a wife, mom, attorney, Ironman, coach and author of Triathlon for the Every Woman. She is a 2015 Klean Team USA member, lives in Atlanta and blogs at [SwimBikeMom.com](http://SwimBikeMom.com).*



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# DAMAGE CONTROL

What to do when your race is exploding before your very eyes

BY JESSE THOMAS

In 2011 I got the chance of a lifetime to race Ironman 70.3 Philippines. It was my first year as a pro, and the first international race of my life. The race organizers brought us in to incredible local fanfare and media, billing the matchup as the “new kid who surprise won Wildflower” (me) versus “the defending champ and one of the best in the sport,” who happened to be Pete Jacobs a year before he won Kona. ¶ I exited the water an expected three minutes behind Pete and rode as hard as I could trying to make up time. I cruised through cheering villages. »



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I got caught up in the excitement, blowing through aid stations, and underestimating the heat and humidity.

As I started the run, the heat came in like a train. I had a hint things weren't right at mile 2. By mile 4, I knew for sure I wasn't going to catch Pete, and by mile 6, I was completely, 100 percent, no doubt in my mind *cracked*.

Cracked, bonked, deflated, done, burnt, smoked, cooked—whatever you call it, every triathlete has experienced a race where at some point in the run it goes from “racing” to “let me live, please.”

When we inevitably face that moment, we have a number of different options to consider and strategies to employ. I've had my fair share of cracked races, so I've had lots of time to experiment with the suggestions below.

#### Should I quit?

This is the first thing that pops into most people's minds, myself included. But it's one that doesn't sit well with most of us because we all think we're super tough triathletes, yada, yada, yada. But quitting *is* the right call if you're at significant risk of an injury or a medical

emergency. If this is the case, you *should* pull the plug. A trip to the hospital isn't cool—it's scary for you and your family. It's also very expensive. In those moments, it's important to remember that it's only triathlon, and there will *always* be another race. I quit one race in my career—Galveston 70.3, my first pro half—because my hamstring was so cramped I thought I would tear it if I continued. I was devastated and cried on the phone to my wife, who told me it was the right call. Three weeks later I won my first Wildflower.

If you aren't risking injury or medical emergency, stay in it. You never know what can happen. I continued at Eagleman after I rode 11 miles off course and ended up winning the Eagleman 81.3 (self-proclaimed competition and champion). It was one of the proudest moments of my career. You won't regret getting yourself across that finish line however you can. Push on and consider these options:

#### Option 1: Die a beautiful death (i.e., give yourself a new goal).

If your race is exploding before your eyes,

it's likely that your initial goal is out the window, so it's important to find a way to keep yourself motivated. It might be a secondary goal, like “just finish” or “at least beat that d-bag from sales.” My wife says that samurais or ninjas or something call this “die a beautiful death.” Just because you aren't going to achieve what you originally set out to do doesn't mean you can't still give it all you've got to the very end. You might be surprised at how proud you feel after doing so.

#### Option 2: Walk.

There is no shame in walking, and it gives you some time to step out of your mind and contemplate some of these options. Each step, no matter how slow, gets you one step closer to the finish line. I've walked in a bunch of races, some that I ended up finishing well because it calmed me down, enabled me to grab more at an aid station, and let a cramp go away. It's a long race—you never know what can happen.

Slow down and take in some hydration and calories. Part of my typical race-is-crumbling strategy is to walk the aid stations. There's a high likelihood that a

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# ENDURANCE ATHLETES USE CONTROVERSIAL METHOD TO BOOST PERFORMANCE IS IT LEGAL?

BY MARK HANSEN

Ask endurance athletes about the three most controversial letters in sport and they will tell you: EPO. However, thanks to recent advances in sports nutrition, the discord surrounding EPO is now over. A company has produced a legal solution to the EPO problem.

EPO stands for Erythropoietin, a hormone that gives blood a greater capacity for carrying oxygen. Doctors first used EPO to counter red blood cell loss that resulted from chemotherapy treatment in cancer patients.

When synthetic EPO became available several decades ago, endurance athletes, especially cyclists, started using EPO to gain an advantage during training and races. The reason was simple: with more oxygen being delivered to muscles, performance and

endurance improved dramatically.

In the mid-1980s, almost all of the governing bodies in sports banned EPO. Unfortunately, endurance athletes in several sports worked to get around these restrictions by using other blood doping techniques to mask EPO use.

The use of synthetic EPO has been extremely controversial. Several star endurance athletes have admitted using synthetic EPO and have faced severe consequences. The subject of EPO use has also gained significant media attention in the last 10 years.

Fortunately, there's a new legal way for cyclists and other endurance athletes to benefit from boosting EPO production. A company called Biomedical Research Laboratories has developed a natural EPO stimulator specifically for athletes seeking to gain an edge.

The product is called EPO-BOOST®. Taken daily, the ingredients in EPO-BOOST® help the body naturally boost circulating EPO levels. With a boost in EPO levels, more oxygen can reach working muscles resulting in dramatic improvements in athletic performance.

The science behind EPO-BOOST® is equally compelling. Dr. M.T. Whitehead from the Department of Health and Human Performance at Northwestern State University conducted a 28-day double-blind placebo-controlled clinical trial to test the effectiveness of the key ingredient EPO-BOOST®.

The research showed that the active ingredient in EPO-BOOST® increased EPO production by over 90% compared to the group taking the placebo. The supplement group showed significant improvements in athletic performance as measured by VO2max and running economy.

EPO-BOOST® is not a miracle pill and it won't make you a world champion overnight. In fact, most users will see that it takes 3-4 weeks to obtain the full performance benefits of EPO-BOOST®. Athletes who use EPO-BOOST® are sharing their results.

Joe Barr, who finished second in his category in the 2014 Race Across America (RAAM), used EPO-BOOST in his preparation for the race. Joe stated, "Since using EPO-BOOST I have finished top 5 in every World Ultra Marathon race I've entered. I've increased my VO2max and my hematocrit levels have increased from 43 to 47. In short, EPO-BOOST is the best supplement on the planet today."

Joey Mesa, a 2013 USA Cycling Masters Champion, stated, "I started using EPO-BOOST this racing season and can really tell a difference. I'm feeling consistently great in all my races and the ability to keep going hard attack after attack is awesome! I've been racing bikes for over 30 years and tried lots of nutritional products, EPO-BOOST just plain works!"

So EPO-BOOST® provides a total solution for athletes in all sports looking for improved energy, endurance, and recovery. EPO-BOOST® is legal for competition. All ingredients in EPO-BOOST® are in compliance with WADA, UCI, IOC, and NCAA rules. Each batch of EPO-BOOST® is certified to be free of banned substances by the Banned Substances Control Group (BSCG) in Los Angeles.

Biomedical Research Laboratories offers a strong guarantee to back the product. Athletes can use EPO-BOOST® for a full 90 days. If the athlete is not fully satisfied in those 90 days, the athlete receives a prompt refund.

A company spokesman confirmed a special offer. If you order this month, you'll receive Free Enrollment into the company's "Elite Athlete Club" where you'll qualify to receive a full 25% discount on all bottles of EPO-BOOST®. And so you always have EPO-BOOST® in your system to increase your endurance, you'll automatically receive a fresh bottle every 30 days. There are no minimum amounts of bottles to buy and you can cancel at any time. You can order EPO-BOOST® today at [www.EPOBOOST.com](http://www.EPOBOOST.com) or by calling 1-800-780-4331.

big part of your bonk is due to dehydration and/or lack of calories. Slow down through the next few aid stations and get as much in as you can. Stop if you have to. You'll be surprised by how much better you can feel in just a mile or two.

#### Option 3: Talk to people.

Whenever I'm stuck in a death march, I always feel like I'm in a slow-motion, super sad music video. Most of the time, it's REM's "Everybody Hurts." But when I interact with someone in the real world, it helps me snap back to reality. A simple "thank you" to volunteers, a "nice job" to a competitor or even a high-five to an unsuspecting spectator can give you energy and help you out of the funk.

#### Option 4: Pretend you're somewhere else.

I do this almost every race, especially on those parts of the course where I'm alone and suffering. I imagine myself partway through one of my favorite loops that I've done dozens of times back home. "Only six miles left, just a river trail loop," "Just a short run to the Plankers for a breakfast sandwich," etc. It helps

me visualize *much* happier times filled with bacon, egg, ham and avocado on a toasted bun.

#### Option 5: Sing to yourself.

I've found that if I get a good song in my head and start singing it—out loud if possible—it helps me snap out of it. Just don't sing "Everybody Hurts."

#### Option 6: Accept the pain.

I discovered this one in college when I was injured, getting a deep-tissue massage on my IT band every ... single ... day. In order for the massage to work, you had to stay relaxed and "accept" the pain while you had the full weight of someone's elbow on your mid-thigh. When I'm hurting like crazy, instead of blocking out the pain, I try to accept it, feel it as much as possible, and then make the conscious realization that no matter how bad it is, I'm going to be OK. I will get through it.

#### Option 7: Think about your kids.

For those of you who are parents, this is like a super power. Whenever I'm really

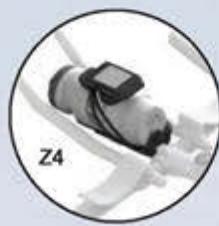
in the hurt box, I think of my wife and son. Sometimes it makes me cry (I'm a crier), but it helps me realize that regardless of how this race goes down, they will still be proud and excited to go play afterward.

So what happened in the Philippines? Well, I didn't quit and set a new goal to finish—mostly because by the time I was cracked, I was in the middle of rice paddies and would have had to walk 6 miles back anyway. I slowed down through aid stations, which wasn't hard because I was already going pretty slow. I pretended I was running one of my favorite loops in Eugene. I started walking, even through cheering villages. Then a random Filipino age-grouper yelled, "DO NOT DISRESPECT THE AVIATORS!" Seriously, that's what he said, and it snapped me out of it. So I accepted that I was in pain, started singing "Holding Out For a Hero" and slowly jogged my way across the finish line. ■

*Jesse Thomas (@jessemthomas) is a five-time Wildflower Long Course champion and the CEO of Picky Bars (Pickybars.com).*

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# swim bike run

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Canadian Angela Naeth celebrates her hard-fought victory at the Ironman North American Championship in The Woodlands, Texas. The multiple half-Ironman champ earned not only a \$30,000 paycheck but also an automatic start in Kona this October—a huge relief since she narrowly missed qualification in 2014. The strong cyclist who thrives in hot and humid conditions outraced 2012 Ironman world champion Leanda Cave, who was runner-up. Naeth will be one to watch on the Big Island.

PHOTOGRAPH BY NILS NILSEN / IRONMAN



## BONUS WORKOUT

Choose a set based on your ability level or how much yardage you need to get in at the pool. The A set is 4000 yards/meters, the B set totals 3000 and the C set is 2000.

## How should I respond to someone who wants to share a lane when I know that our levels are very different?

—@tri2ride 

**A:** There is enough room in a typical lane to "split" or accommodate two swimmers side-by-side. One swimmer stays on the right side of the black line and the other swimmer stays on the left side. This way, contact can be avoided and a fast and slow swimmer can share comfortably.

If a stronger swimmer asks to share your lane, communicate what side of the lane you will stay on. Take advantage of the other body in your lane to get used to having people near you and making waves in the water.

Make the same accommodations if a weaker swimmer asks to join your lane. Politely notify them if you will be doing any atypical training (diving, sprints, butterfly, etc.) that might cause excess turbulence.

**Q:** I only have 30 minutes to get in the pool. What's my best option to get faster? —@26Point\_2Miles 

**A:** Even 30 minutes in the pool can be turned into an efficient swim practice for a busy triathlete. Save time by starting your swim after another workout so you are already warmed up. If you can get to the pool after completing a run, bike or gym session, you can cut out the typical 10 minutes of warm-up laps.

Maximize your training time by knowing the set or workout beforehand. It

should be simple, concise and preferably repeatable to reduce confusion.

**Example (repeat as much as possible):**

- 4x50 with band on 1:00 (descend 1–4)
- 300 swim strong with 30 sec rest

Avoid getting in the water and swimming non-stop or mindless laps for the 30-minute time period. A high-intensity set will give you more bang for your buck by keeping you in a race-specific mode for a large percentage of the available time.

**Q:** How long does it typically take to see time and/or speed improvements in the pool? —@PaulFwoosh 

**A:** Unfortunately, there is no precise equation—each person's swimming ability will progress at a different rate. However, there are a few things you can do to set yourself up for progress:

- **Hire a coach or follow a training plan.** Any organized training is better than nothing.
- **Set a routine.** Swim at a regularly scheduled time for a pre-set amount of time.
- **Get a stroke analysis.** What we *think* we're doing in the water and what we are actually doing is often very different.
- **Plan a swim training block.** Make two weeks every three months a swim focus where you swim twice as often to break through any plateau.



GOT A SWIMMING QUESTION? COACH SARA WANTS TO HELP. JUST TWEET YOUR QUERIES TO @SARALMCLARTY

**A****10x400 with 30 sec rest**

- #1 Easy, warm up
- #2 50 kick/50 non-free/repeat
- #3–5 Pull, descend time 1–3
- #6 50 non-free/50 drill/repeat
- #7–9 Swim, descend 1–3
- #10 Easy, cool down

**B****10x300 with 30 sec rest**

- #1 Easy, warm up
- #2 50 kick/50 non-free/repeat
- #3–5 Pull, descend time 1–3
- #6 50 non-free/50 drill/repeat
- #7–9 Swim, descend 1–3
- #10 Easy, cool down

**C****10x200 with 30 sec rest**

- #1 Easy, warm up
- #2 50 kick/50 non-free/repeat
- #3–5 Pull, descend time 1–3
- #6 50 non-free/50 drill/repeat
- #7–9 Swim, descend 1–3
- #10 Easy, cool down

—SARA McLARTY

Pro triathlete and swim coach Sara McLarty has 25-plus years of experience and knowledge about swimming mechanics, efficiency and technique.

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# HAIRY SITUATION

Prevent and treat swimming damage to your tresses with four simple strategies. **BY SUSAN LACKE**

## 1 CHOOSE THE RIGHT CAP

One-size-fits-all swim caps, especially those made of latex, can tug on the scalp and break hair follicles. Choose a cap made of silicone instead, and find one that is snug but not overly tight.

**TYR MULTI SILICONE SWIM CAP**  
\$10  
[TYR.COM](http://TYR.COM)

**SPEEDO OPTIMISM SILICONE CAP**  
\$15  
[SPEEDOUSA.COM](http://SPEEDOUSA.COM)

## 2 SATURATE

During your pre-swim rinse, thoroughly wet your hair with water. This simple soak will minimize the amount of water your hair can absorb afterward. For added protection, apply a pre-swim protecting gel before donning a cap.

**PHILLIP KINGSLEY SWIMCAP CREAM**  
\$38, 5 OZ  
[PHILLIPKINGSLEY.COM](http://PHILLIPKINGSLEY.COM)

**REFLECT SPORTS PRE-SWIM PROTECTING GEL**  
\$15, 8 OZ  
[REFLECTSPORTS.COM](http://REFLECTSPORTS.COM)

## ARE YOU SEEING GREEN?

Light-haired swimmers sometimes notice a greenish tint to their locks post-swim. If a swim-specific shampoo doesn't correct the problem, try a home remedy. Swimmers have found a multitude of household products to be effective in removing hair discoloration: tomato juice, lemon juice, aspirin (dissolved in water), and baking soda are commonly recommended home treatments for swimmer's hair.

# swim

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Leave-in treatment  
Leave-in treatment

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Enriched with  
Organic Aloe Vera and  
ProVitamin B5 & A

damage remedy.  
intensive restructuring treatment  
strengthen hair with long repair  
traitement renstructurant en profondeur  
rendez les cheveux par la réparation profonde  
5 fl. oz. / 150 ml e

## 3 CLARIFY

Chlorine bonds to skin and hair, requiring a thorough cleansing to remove residue post-swim. To expedite the process, use a clarifying shampoo or spray designed to remove chlorine from hair.

**DOC'S SKINCARE ALL NATURAL SWIM SHAMPOO**  
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[DOCSKINCARE.COM](http://DOCSKINCARE.COM)

**TRISWIM SHAMPOO & CONDITIONER SET**  
\$32, 28-OZ BOTTLES  
[SBRSPORTSINC.COM](http://SBRSPORTSINC.COM)

**SWIMSPRAY**  
\$15, 4 OZ  
[SWIMSPRAY.COM](http://SWIMSPRAY.COM)

## 4 CONDITION

Saltwater and chlorine can strip hair of its natural protective oils, resulting in loss of shine and decreased manageability. Restore your hair's nutrients with a deep conditioning treatment at least once per week.

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# EASIER THAN IT LOOKS

A step-by-step guide to nail five important pool skills **BY SARA McLARTY**

**INCREASING YOUR COMFORT LEVEL IN A POOL IS A GOOD WAY** to become a more proficient open-water swimmer. Master some of these “tough” maneuvers with these simple steps.

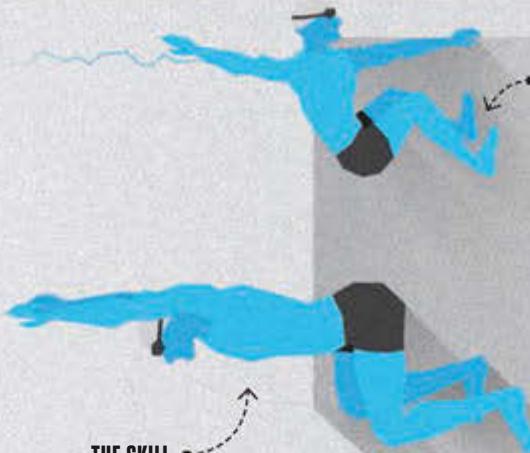


## THE SKILL: DIVE

1. Stand at the edge of the pool with arms in streamline position and chin tucked to chest.
2. Bend at the waist until your fingers and head are pointing toward your entry target.
3. Slowly lean forward and glide into the water, fingers first. Stay in a streamline position with chin tucked until you are fully submerged.

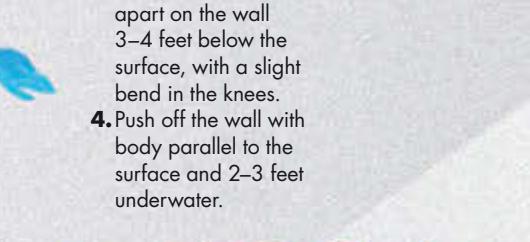
\*Beginner: Start from a crouch or on your knees at the edge of the pool.

\*Advanced: As you fall forward, push off with your feet to get distance and momentum.



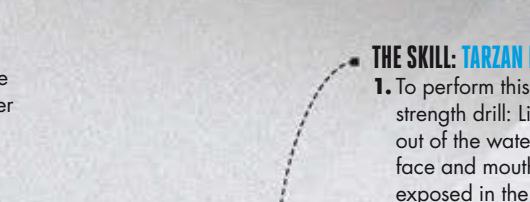
## THE SKILL: UNDERWATER PUSH-OFF

1. Start in a streamline position in the water.
2. Face the opposite side of the pool, submerge upper body, and point fingers in direction of travel.
3. Place feet hip-width apart on the wall 3–4 feet below the surface, with a slight bend in the knees.
4. Push off the wall with body parallel to the surface and 2–3 feet underwater.



## THE SKILL: A PERFECT STREAMLINE

1. Place the palm of one hand on back of other hand.
2. Hook the top thumb around bottom hand to keep them secure.
3. Squeeze biceps against the sides of head and tuck chin to chest.
4. Stretch entire body long and tall like a dart.



## THE SKILL: TARZAN DRILL

1. To perform this strength drill: Lift head out of the water until face and mouth are exposed in the direction of travel.
2. Increase cadence of arm strokes by shortening the pull and finish phases.
3. Lightly arch your back (push hips down) to elevate feet near surface.
4. Maintain a strong kick to provide forward momentum.

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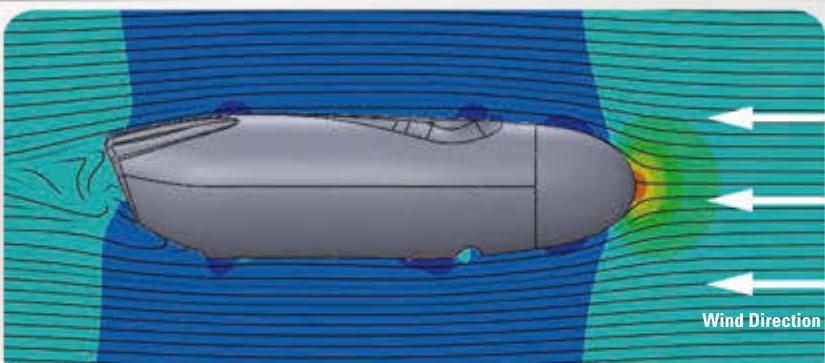
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# CADENCE CONCLUSIONS

Match your optimal cadence to your effort using these guidelines. **BY BETHANY RUTLEDGE**

## WHICH CADENCE SHOULD I RIDE FOR MY

event? There is no such thing as a perfect cadence, but cadence is an important piece of the overall cycling puzzle. This is a common question from new cyclists who only use miles per hour and cadence to measure their performance. Here are a number of factors to consider in cadence selection.

## Spinning faster won't get you very far.

Many beginners believe that a faster cadence is always better. While it is true that if you keep a constant force on the pedals and pedal more revolutions per minute (RPMs) you will technically go faster. If it were that simple, though, getting fast on the bike would be a lot easier. If you've been to a spin class lately, you've seen what focusing on only cadence looks like—people bouncing all over the saddle at extremely high RPMs with little to no resistance. They may be burning calories, but they're not improving their ride performance.

## Is higher always better?

Long-time advocates of high-cadence cycling will point to the classic ex-

ample of Lance Armstrong vs. Jan Ulrich. Lance rode away from Jan with his higher cadence compared to Jan's preferred lower RPM style. The truth is, Lance was just a better cyclist overall, one who happened to prefer a higher cadence riding style. The same is true with you—your best cycling performance may be achieved on a range of "normal" (commonly cited as 80–100 RPM) as opposed to always pushing for higher cadences.

**Put cadence in context.** If you've trained with power, you know that the same watts can be achieved with 60 RPM, 80 RPM or 100 RPM. Which way of getting to X feels the easiest to you is what varies. As triathletes we have the additional factor to consider of how our cadence selection and overall force application impacts the run.

**Low vs. high.** Power (watts) is torque (force put on the pedal) times rotational speed (cadence). A low cadence equals high force, which requires more fast-twitch muscle recruitment, while a higher cadence means lower force and more slow-twitch fiber recruit-

## EXTERNAL REASONS FOR LOW CADENCE

Is your cadence below the "normal" range (80–100 RPM) and you just can't seem to change it? There could be other external factors at play.

**Proper gearing:** Your strength as a rider plus the terrain you'll be facing dictates proper gearing. If you're not sure of your chainring size or find yourself looking for another gear on hills, you might visit your local bike shop to see if a cassette swap is in order.

## Appropriate crank length:

Do you know your crank length? If you have the wrong size and are thus "reaching" each pedal stroke, a crank change could increase your cadence and efficiency by opening your hip to relax and therefore engaging more of your glute muscle, says fitter and Podium Multisport owner Matt Cole.

## Proper fit:

If you have an improper fit, your body angles could be forcing you into a certain RPM range.

ment. To explain further, a higher cadence "burns fewer matches" and tends to stress your cardiovascular system more, while cycling at a lower cadence stresses your muscular system more.

Cycling at a lower cadence also recruits more muscle fibers overall as well as more fast-twitch fibers. As far as your cardiovascular system goes, lower-cadence cycling costs less in terms of oxygen consumption but is more taxing on the muscles from a strength perspective.

**Saving it for the run.** Higher cadence advocates may point to studies performed showing that study participants performed better on a subsequent post-cycle run than subjects who cycled at a low cadence. The truth is that there are conflicting studies that show better running success after cycling at various cadences. What matters is that you train yourself to run well after cycling at race-pace intensity by practicing adequately during training efforts.

Cadence selection overall is not an either/or proposition. Your personal strengths, weaknesses, physiological makeup and comfort preference determine your optimal cadence. And the terrain often dictates a necessary change in your RPMs. A rider who is training regularly at a variety of cadences will eventually find his or her optimal cadence for training and racing.

You should train at various cadences to increase your comfort level and to improve your fitness. Over-gearing, or big gear work, can help you develop strength, and practicing pedaling with a higher cadence at a range of intensities can help improve pedaling efficiency. Form work such as one-legged pedaling drills and spin-ups can also help improve your pedal stroke.

Don't let a preoccupation with cadence cloud what's really important: making sure you develop the ability to maintain your goal power through your most efficient application of cadence during your goal event.



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or spectacular breakthroughs that provide mental fuel for a long season. The Ordu OME has been designed to push you past what you thought was possible – to that magical day when you don't feel the wind or relent to the pain – when you don't just finish the race, you crush it.

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# THE SHORT LIST

Update your collection with one of these ride-tested bibs and cycling shorts. **BY JENÉ SHAW**

→ Finding the right pair of bibs or cycling shorts is very similar to discovering a favorite pair of jeans. Considering it's a clothing item that you'll wear on a weekly basis, investing in a quality pair of bottoms will make your rides more enjoyable—and your training better.

## SOME FEATURES TO CONSIDER WHILE SHOPPING:

- ▶ **Inseam:** Longer, full coverage or shorter?
- ▶ **Leg opening:** Silicone grippers, compressive band or none?
- ▶ **Chamois:** Thick and plush? Thin and dense?
- ▶ **Fit:** Compressive or relaxed?
- ▶ **(Women) Waist:** Elastic or yoga-band?
- ▶ **(Women) Style:** Bibs or shorts?

## WOMEN'S

### 1 GIRO RIDER HALTER BIB \$150, [GIRO.COM](http://GIRO.COM)

We not only put these bibs to the riding test, we also made sure their comfort held up at post-ride coffee stops. (They passed, easily!) The brilliant—and shockingly simple—design of the halter bib means you don't have to take off your jersey for a bathroom break, and they are seriously as comfortable as sweatpants throughout the entire fit. We might opt for a thicker chamois on epic Saturday rides, but for everyday comfort, these are a new favorite.

### 2 ENDURA FS260-PRO BIBSHORT DS \$140, [ENDURASPORT.COM](http://ENDURASPORT.COM)

When we first saw these bibs debut at Interbike last year, we thought, "How has no one already thought of this?" Check this out: A zipper in the back gives the shorts a dropout function so you can keep your full kit on during pit stops. Although skin pinching was an initial fear, the zipper goes back up with ease. The white piping on the shorts adds a flattering element, and the bib straps hit a comfortable place on the sides of the chest so there's no smushing effect.



**Highlights:** Super comfortable, clever design, terrific fit on multiple body types

1

2

**Highlights:** Long-ride ready with a smart drop-out zipper, durable chamois

## SMART DESIGN ALERT!

Two new bib options make it easier for women to enjoy the benefits of bibs without holding up the group ride at gas station breaks.

**3 PEARL IZUMI SYMPHONY CUT SHORT**\$60, [PEARLIZUMI.COM](http://PEARLIZUMI.COM)

Not a fan of the long shorts look? Pearl Izumi offers this five-inch inseam for women who prefer a shorter cut. One of the best features of this short is the waistband—instead of elastic around your belly (hey there, muffin top), the soft material forms an overlapping V in front, which is breathable and more comfortable when leaning over in the aerobars. The chamois is plush, but the shorts may be best suited for shorter rides and spin class (and reasonable for the gym at only \$60).

**4 ASSOS H.LAALALAISHORTS\_S7**\$189, [ASSOS.COM](http://ASSOS.COM)

If anyone knows how to make shorts with a "like buttah" feel, it's Swiss brand Assos. The company's bibs have always been a highly coveted (and luxury priced) item for male cyclists, and Assos recently further developed its women's line. These lightweight shorts offer some of the benefits of bibs without the straps, including a high back to prevent any short jerseys from accidentally showing skin, and a forgiving waistline for mid-ride belly bloat. The Assos quality shows in the waffle-textured, breathable chamois and the overall compressive, soft material.

**Highlights:**

Breathable waistband, feminine cut

**Highlights:**

High-quality chamois, compressive and smooth material, forgiving waistline



5

**Highlights:**

Smooth yet durable feel, flexible chamois



6

**Highlights:**

Aero-friendly chamois, spot-on fit, stretchy straps



7

**Highlights:**

Ideal chamois thickness, flat-lock seams

**MEN'S****5 LOUIS GARNEAU COURSE RACE 2 BIB**\$250, [LOUISGARNEAU.COM](http://LOUISGARNEAU.COM)

With aerodynamics as a focus, Louis Garneau created a performance-oriented bib that is free of any large seams and feels like a second skin while riding. The laser-finished material at the leg opening stays put despite not having any silicone grippers to speak of, and the chamois is flexible for freedom of movement and is mapped out to relieve pressure in important areas. Plus, to ensure comfort for a variety of riders, sizes range from XS–XXL.

**6 POC CONTOUR AEROFOIL BIBS**\$350, [POCSPORTS.COM](http://POCSPORTS.COM)

POC designed a 3D-molded chamois with the hope of providing a more custom fit for each rider and added silicone inserts under the sit bones to increase comfort and durability. Testers loved the chamois, especially in the aero position, and the super thin and stretchy mesh straps make it easy to shift between the aerobars and hoods. The material is seamless, with an integrated leg gripper to avoid any too-tight silicone rings around the thigh.

**7 CASTELLI FREE AERO RACE BIBS**\$200, [CASTELLI-CYCLING.COM](http://CASTELLI-CYCLING.COM)

Castelli has been perfecting its signature bib since 2007, and the latest edition continues to improve on the comfort of former iterations. Our tester said these bibs are the first ones he grabs out of the closet after laundry. The updated leg gripper is snug but not too tight, and the antibacterial chamois is thin yet dense, providing long ride comfort without excessive bulk. Know before you buy: The cut is classically Italian, so consider sizing up.

## kit of the month



## SEARCH AND STATE

▲ When flashier kits go out of style, Search and State's polished look will remain a classic mainstay in your cycling wardrobe. Created in Midtown Manhattan, Search and State's tailored kits focus on luxury and comfort, with a simple, subtle design that performs. Testers like the "perfect fit" of the jersey with a slightly longer sleeve cut, and found the bibs had a just-right leg width and waist size (one tester noted, however, that the straps seemed a little shorter lengthwise compared to other kits). The jersey material is thin and light, and the bibs have a thick chamois best suited for road bike rides. The leg gripper stayed put without being too tight, even while going in and out of the saddle during a three-hour cyclocross ride. —JENÉ SHAW

**\$1-A RIDING JERSEY, \$140**  
**\$1-S RIDING BIB SHORT, \$215**  
[Searchandstate.com](http://Searchandstate.com)

## CAT CALL

Feline fans will purr over this cycling gear.



### FORWARD CYCLING KITTY CAP

\$30, [RideForward.com](http://RideForward.com)

With the brim down, this cycling cap looks like a bowl of mint chocolate chip sprinkle ice cream, but when you flip it up, it's, well... purrfect. The cap sells out quickly, but as of press time, a new color way is slated for delivery soon. Another "aww" factor—10 percent of the kitty cap profits go to the SPCA to help animals in need.



### CATLIKE CHRONO WT

\$300, [Catlike.es](http://Catlike.es)

On a more serious note, Spain-based Catlike recently released its new Chrono TT helmet (also available in white), with a few configuration options, including the option to plug the front vent, remove the visor or add extra padding for comfort. It's a little back-heavy, but by adjusting the fit inside, it will stay put to slice through the wind. —JENÉ SHAW

# THE FUTURE OF SPEED

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*Alicia Kaye*  
2014 Toyota Series Champion

**VENTUM**

[ventumracing.com](http://ventumracing.com)

# STRENGTHEN YOUR MENTAL MUSCLE

Do these run workouts with an emphasis on brain training to get faster. **BY MACKENZIE LOBBY HAVEY**



→ Nurturing the connection between body and brain during training can be one of the most important aspects of preparing for competition. We often think of our workouts as exercises to train the legs and lungs, but we forget the important role the mind plays in that process. Indeed, most triathletes can recall a race when their mind limited performance, even when their body could have pushed through. That's why building mental toughness through training is so imperative.

We consulted a couple of coaches to better understand the brain training that underpins three popular types of running workouts—tempo runs, interval sessions and long runs. They help explain both the reasoning behind these workouts when it comes to building mental toughness, as well as some key things to think about on the run.

## WORKOUT: INTERVALS

**Mental purpose:** Interval training can help you realize what your body is truly capable of. “Because interval runs push the body physically beyond what is comfortable, it will also push you mentally and teach you that it’s OK to go beyond your comfort zone for a short time,” says Sara Dimmick, a USA Triathlon-certified coach and founder of Physical Equilibrium in New York City. “Once athletes successfully do this over and over, they will have more confidence pushing their physical body past what their mind says is OK.”

**Think this:** This breed of workout teaches you not to mentally bite off more than you can chew. “Break the workout down to one interval at a time,” says Leathers. “Stay in the moment of the work that’s being done, rather than thinking about how many repeats are left. Take one at a time.” This can be a particularly important skill in longer races. Rather than thinking about the race from start to finish, you are better off envisioning it as a series of distances you check off your list as you hit each milestone.

## WORKOUT: LONG RUN

**Mental purpose:** Your weekly long run serves as an important confidence booster on race day. “Not only does the long run prepare you physically, but also mentally,” explains Dimmick. “In longer events, like Ironman, an athlete can be out on the course for a long time, so if you have practiced and prepared by doing long runs, it will give you the confidence that you can complete the race.”

**Think this:** Long runs are a great time to employ visualization strategies that are important when the going gets tough in a race. “Visualizing successfully completing the course and crossing that finish line can help push you during long runs,” adds Dimmick.

## ▼ WORKOUT: TEMPO RUN

**Mental purpose:** Tempo sessions generally involve anywhere from 10–45 minutes of running at or near race pace to help you get comfortable being uncomfortable. “I love tempo runs because it is as close as I can get my runners to the mental and physical stress that race day will provide,” explains Kevin Leathers, a Road Runners Club of America-certified coach based in Memphis. “Every time we ignore those inner voices screaming ‘slow down,’ we build our mental stamina that we can draw from on race day.”

**Think this:** These workouts offer the perfect training ground for developing positive self-talk strategies and productive running mantras. Leathers suggests inner dialogue that includes phrases like, “Keep pushing” and “Don’t give up.”



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# RUN STRONGER OFF THE BIKE

Make your bike-to-run transition easier by reinforcing a fast turnover. **BY JENÉ SHAW**

## WATCH THE BEST TRIATHLETES

transition in any race and one of the things you'll notice is their ability to seamlessly run off the bike. To start the run without slogging takes a concentrated effort. Set your transition legs up for success with these tips from Steve Trew, a longtime British triathlon coach and co-author of the book *100 Essential Triathlon Sessions*.

## MAINTAIN A HIGH RPM ON THE BIKE

As discussed on page 52, this tip comes with a warning sticker—some athletes (like Chrissie Wellington) can crank out a very low RPM and still maintain a high run cadence due to how they react to training and their ability to negate muscle memory. But for most

athletes, especially at shorter distances, there's a good case for keeping up the cadence (85+ RPM), particularly toward the end of a discipline, Trew says.

"There's muscle memory to take into account, and if your legs have been turning over at 85/90/95 RPM, there's no huge shock to them to try to go into the run discipline at approximately the same [180 foot hits per minute]," Trew says. "To try to transfer 60 RPM on the bike directly into 180 foot hits is a massive ask."

However, he believes, it may be different for iron-distance races. "There's a lot of time to get the body and legs to accept the necessary changes, and some distance triathletes can race brilliantly on a bigger gear and slower

cadence for Ironman. For half-Ironman, there is now a real need for run speed, so a lot of thinking is required from athletes as to what's individually best for them."

## SHARPEN UP WITH SHORT SPEEDWORK

This workout from Trew's book (which he co-wrote with coach Dan Bullock) is a set of 400-meter efforts aimed at improving strength, speed and the mental toughness to maintain race pace under pressure.

**What it is:** A set of repetition 400m efforts, all based at 3,000m race pace\*, but with "a sting in the tail." Ten 400m efforts are run at 3K race pace; the first three are run with just 20 seconds of recovery between them then a 1-minute recovery. The second three follow that same pattern. Finally, a fourth 400m is added to the last round, making this a very demanding session.

**\*To calculate your 3K race pace, Trew says this:** Probably the simplest way is to add on around 15 seconds per mile as you go up a distance. So, if you run a 5-minute mile then you'd run a 10:30 two miles (5:15 mile pace). So for doing reps over 400m, it would be around 4 seconds difference. For example, 6:00 mile pace over a 5K race would give 5:45 mile pace over 3000m, so reps on 400m at 1:26.

### WORKOUT: 10x400m total

13x400m with 20 sec recovery after each  
160 sec recovery  
13x400m with 20 sec recovery after each  
160 sec recovery  
14x400m with 20 sec recovery after each  
160 sec recovery

**Variations:** Add two extra 400m, making the sub-sets three, then four; and finally five efforts for a total of 12 in all. Even more demanding!

## MAINTAIN A STRONG RUNNING FORM

Follow these form pointers—and focus on them both in training and during a race—to ensure you're not blowing your efficiency.

DON'T DO THIS	
FORM FAIL	INDICATORS
Over-striding	Braking effect stops momentum with each stride
Seated running	Hips back, bum out
Tight shoulders	Shoulders are tense and your neck disappears
Forced breathing	Shallow breaths or holding your breath, which will lead to early fatigue
Tight head position	A rolling, bobbing head, detracts from run technique
Heel strike	Foot strike under knee
Vertical movement	Bobbing up and down while running
DO THIS	
FORM FOCUS	HOW TO
Deep belly breathing	Focus on breathing out rather than in.
Upright running	Push hips forward, lean forward from your feet.
High stride frequency	Shorten your stride and maintain a good cadence of 90+ RPM on all runs.
Consistent arm swing	Beware of an uneven arm action.
Focus on the ground 15-20 feet ahead	Look ahead and relax your lower jaw—practice on all types of runs.



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# HEAD CASE

Will a hat or visor keep you cooler on the run? We had an expert weigh in on this hotly contested (get it?) topic. **BY BETHANY LEACH MAVIS**

## SOME TRIATHLETES SWEAR BY VISORS

on the run, insisting they make them *feel* cooler, while others believe a hat is the smartest headwear option because it allows them to put ice on their heads at aid stations. Mat Steinmetz, the founder of 51-Speedshop.com and a coach who has worked with top-level names such as three-time Kona champ Craig Alexander on his heat management, suggests a visor in most cases, as fabric typically interferes with the evaporative effect of sweating.

Hats can protect your scalp from radiant heat, but they can also lessen evaporative and convection cooling. "Most research shows that although skin head temperature increases and you feel hot, core body temperature does not," Steinmetz says. "A cool head, however, does influence comfort, as the head impacts whole body thermal sensation"—as in, if you think you feel cool, it could make your

whole body feel cool, even if your core temperature isn't actually any lower. (Note that if you put ice in your hat, it could cause vasoconstriction, or narrowing of blood vessels, and reduce heat loss, which would have the opposite desired effect, Steinmetz says. It won't reduce your core temperature, but it could improve your comfort level or perception of heat—at least until it melts.)

If you choose a hat, Steinmetz recommends a full mesh hat that allows air to pass through. "I would look for a material that doesn't absorb moisture other than the sweatband to reduce becoming weighted and a nuisance," he says. Look for mostly white, and popular athlete-specific trucker hats are a good option.

If you opt for a visor, select a white visor with a black under-brim (to reduce glare). Look for the same qualities as the hat in regards to absorbing moisture—you don't want the visor to get heavy and uncomfortable.

## KEEP COOL

With these four run-friendly headwear options



### HEADSWEATS GRID SUPERVISOR SUBLIMATED

\$22, [HEADSWEATS.COM](http://HEADSWEATS.COM)  
Classic visor style with an elastic band, terry sweatband and black undervisor



### ASICS SPEED CHILL VISOR

\$28, [ASICSAMERICA.COM](http://ASICSAMERICA.COM)  
A lightweight, breathable visor featuring cooling technology in the liner fabric



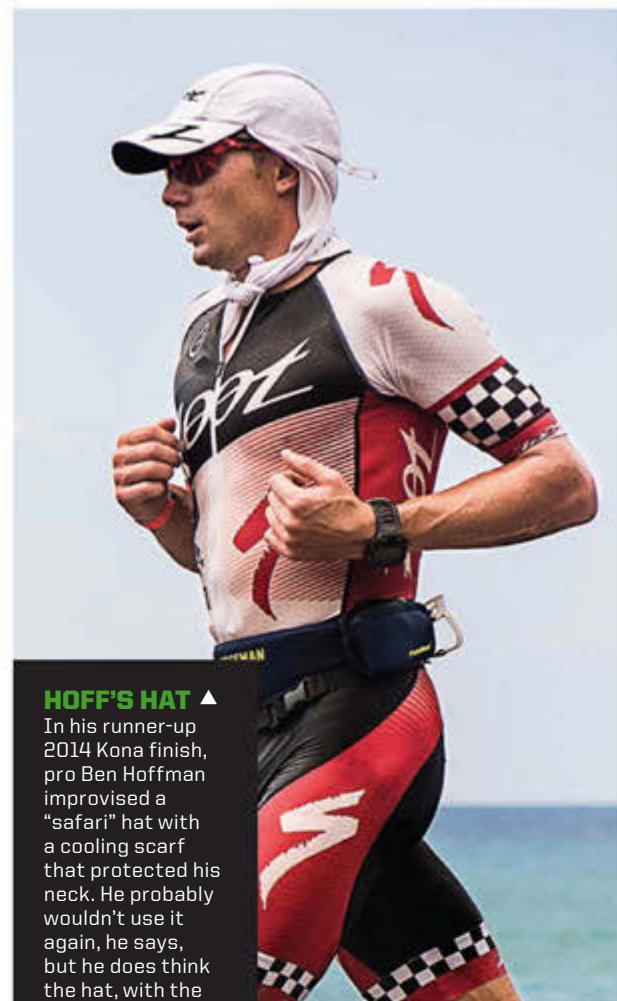
### BOCO TECHNICAL TRUCKER

\$24, [BOCOGEAR.COM](http://BOCOGEAR.COM)  
Features a wicking sweatband, performance fabrics and the style was popularized by pro Luke McKenzie in Kona in 2013



### BROOKS HVAC MESH HAT

\$24, [BROOKSRUNNING.COM](http://BROOKSRUNNING.COM)  
An all-mesh, moisture-wicking cap with reflective details



### HOFF'S HAT ▲

In his runner-up 2014 Kona finish, pro Ben Hoffman improvised a "safari" hat with a cooling scarf that protected his neck. He probably wouldn't use it again, he says, but he does think the hat, with the ability to add ice and sponges combined with the scarf, kept him cool. Hoffman holds that even just prepping for heat management can have a mental benefit: "If you believe something helps and works, then it does!"

"In the end, I think it comes down to personal preference," Steinmetz says. "There is a lot that goes into thermoregulation in hot and humid environments. ... You should choose what you perceive as feeling more comfortable. Your head, neck or face feeling cool has a big impact on your comfort level, even if it doesn't reduce core temperature."

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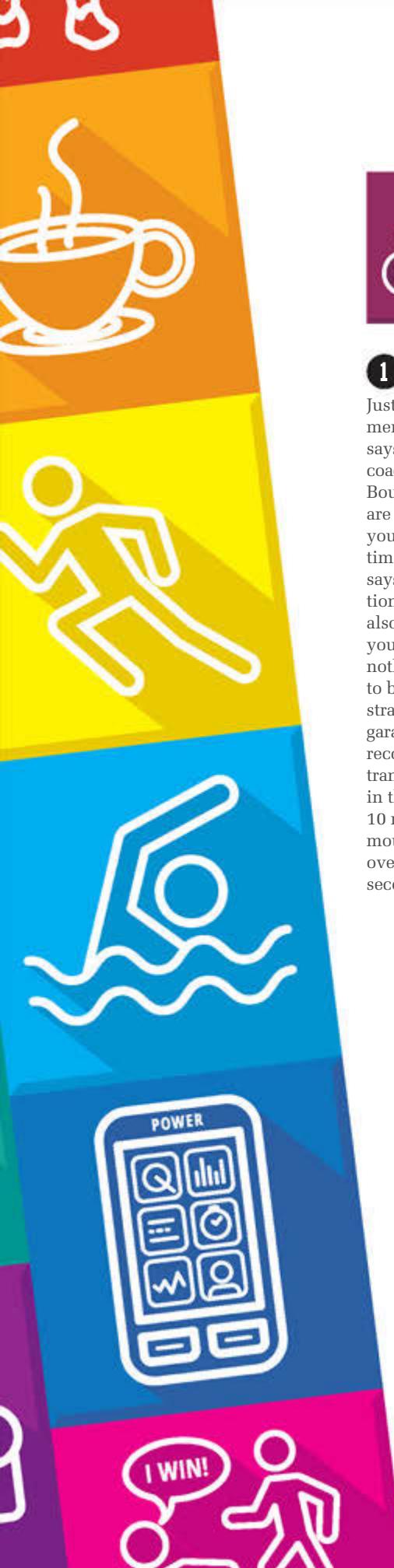
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# 17 REASONS YOU'RE NOT GETTING FASTER

Experts weigh in on the small things you're neglecting that could give you a boost on race day.

BY JULIA BEESON POLLRENO  
AND BETHANY LEACH MAVIS





### 1 You don't practice transitions.

Just a little time investment will go a long way, says Mike Ricci, the head coach of D3 Multisport in Boulder, Colo. "Transitions are free speed—the faster you can do them, the less time you are wasting," he says. Practicing transitions ahead of time is also a chance to dust off your racing gear—there's nothing like being unable to buckle your aero helmet strap after leaving it in the garage all winter. Ricci recommends practicing transitions once per week in the season, even for just 10 minutes to go over bike mounts and dismounts, over and over to make it second nature.

## 2 YOU'RE NOT DRINKING ENOUGH COFFEE.

Your Instagram feed is likely flooded with photos of triathletes paying homage to their beloved mid-ride espresso, and science explains why it's not just about the pretty foam art. According to the American College of Sports Medicine, studies suggest that caffeine improves performance during both endurance exercise and high-intensity, short efforts in the lab. Pro Timothy O'Donnell uses caffeine "religiously" in his training and racing. He starts his training day with a jolt of java but warns against depending too heavily on caffeine for energy. "I used to rely on coffee in the afternoons before second (or third or fourth) sessions but found that to be a slippery slope," says O'Donnell, who switches to decaf after 1 p.m. "If I needed coffee to get through those sessions then I was probably too tired to do them properly and was forcing myself into over-training." But on race day, caffeine is central to O'Donnell's fueling plan. In an Ironman, he alternates gels between caffeine-free CLIF Shots and double espresso (100 milligrams of caffeine) CLIF Shots on the bike and uses Salt Stick caps with caffeine and will also drink Coke toward the end of the ride. On the run, it's more Coke and caffeinated citrus CLIF Shots. Training—and racing—with caffeine is something you'll want to fine-tune, though, to keep GI distress at bay.



### 3 You're going too hard on recovery days.

In Jesse Kropelnicki's extensive experience as head coach of QT2 Systems, most triathletes aren't taking their recovery efforts easy enough. The primary purpose of a recovery day is to keep the soft tissue pliable and flexible, he says. "Running very often, including recovery days that are very easy, helps keep



the soft tissue very flexible which helps avoid injury and promotes good blood supply," says Kropelnicki, who famously prescribes 10-minute-per-mile recovery runs for pro Linsey Corbin. "If these same recovery sessions are taken too hard, more stress is applied than intended, and these same sessions become injury creators and also undermine the athlete's ability to push the hard days that actually do help make them faster." So how slow should you go? Kropelnicki advises doing your recovery runs at least 2 minutes per mile slower than your aerobic running pace.



#### 4 You're not committed enough.

After a full day at the office, your colleagues are winding down the day with happy hour and ask you to come along. Do you A.) Blow off that trainer workout until tomorrow—it's been a long day, you deserve a cold one; B.) Resist the temptation by anticipating how good it will feel to check that trainer session off in Training Peaks; or C.) Proudly decline the invitation while outlining every nuance of every planned interval to your non-triathlete co-workers? The correct answer, of course, is "B." While the multisport lifestyle doesn't need to border on monastic, it does require some prioritizing that may have your beer buddies feeling neglected from time to time. Embrace the focus and commitment that training for your goal race requires. Instead of perceiving your swim, bike and run demands as another obligation crowding your schedule, try to think of that time as a reclamation of your personal time and what's important to you—your health, athletic challenge or whatever it is that motivates you in the sport. And then crack that beer after your trainer session (or in the post-race beer tent) to reward your discipline.

## YOU'RE NOT FUELING LONG RIDES PROPERLY.

It's easy to do: You're out for a long ride, you forget to eat, then you carb-binge at a gas station stop, chowing down 700 not-so-healthy calories in five minutes (those Pop-Tarts just sound *so* good). You're craving carbs to refill your glycogen stores, which are usually depleted about 90 minutes into a ride, but eating high-sugar, low-nutrient foods might not even get you to the end of your ride, says Katie Barberi, a nutrition coach who works with the California Giant Cycling Team and owns

the company Forever Living Deliciously. The sugary foods will go straight to the blood stream, fueling your body immediately, but you're not giving your body a chance to replenish its glycogen stores, so your blood sugar will likely drop again before you finish the ride.

As a result, you're not getting the most out of your training. If you aren't dosing out calories consistently throughout your ride, "your body is going to be focusing so much time on trying to

refuel or find ways to fuel the body that it won't be able to allow you to train at the level you need to," she says. "You will start to see noticeable drops in power and in your ability to keep up the paces that you were." It's also a missed opportunity to practice your race nutrition.

So what's a better plan? Barberi has her clients eat every hour for any rides more than 90 minutes. For early in a ride, eat a CLIF Bar, which has an ideal mix of carbs, protein and fats and about 240 calories. Toward the end of the ride, you can move on to energy gels, chews and Coke, as they are digested more quickly and won't give you the same "rollercoaster effect" with your blood sugar as they would earlier in the ride. Also, aim to drink at least one bottle with a carbohydrate and electrolyte drink mix per hour.





## 6 YOU'RE NOT DOING THIS SWIM SESSION.

Los Angeles-based open-water swim coach Bryan Mineo sees it all the time: Triathletes of all levels show up to the pool, put on their waterproof MP3 players and "just go through the motions" of completing a swim workout. "Approaching swims with no particular focus or training goal not only limits chartable progress but can also dull the interest of swim training all together," says Mineo. Instead, the goal, he says, should be to increase lactate threshold and consistently train at that pace with progressively shorter rest intervals. Enter the time trial. "Performing monthly time trials can give you a specific base pace to work from and a metric that easily highlights fitness progress," Mineo says. Here are two tests that coach Mineo uses with his athletes to determine lactate threshold speed and help them gauge how race-ready they are.

### 1500-yard TT

"This may seem like punishment," Mineo says, "but practicing how you will race a mile allows you the trial and error of proper pacing. Before you perform the test, do a short warm-up and a few build sets to get you prepared. Mentally breaking up the 1500 into three pieces can mimic the strategic structure of how you'll race—go out fast and establish rank, settle in and then finish with whatever you've got left in the tank."

### Mineo's favorite TT

This was designed by world-renowned swim coaches Paul Newsome and Adam Young. After warming up, you begin with a 400 TT. Recover with a couple easy 100s. Next, perform a 200 TT. Those two times are then put into the formula below to calculate your lactate threshold speed.

$$(\text{Meters/seconds}) = \frac{(400-200)}{(T400-T200)}$$

An example for someone who swims a 6:00 400m TT and a 2:48 200m TT:

$$\begin{aligned} & \blacksquare 200/(360-168) \\ & = 200 \text{ meters}/192 \text{ seconds or} \\ & \blacksquare 100 \text{ meters}/96 \text{ seconds totaling} \\ & \blacksquare 1:36/100 \text{ meters} \end{aligned}$$



### 1 You're approaching your run training wrong.

"The fact that athletes need some form of repetition training if they want to perform is pivotal," says Bobby McGee, famed running coach and USA Triathlon Performance advisor. The benefits for long-course racing, McGee says, include greater functional strength and power to increase ease at race pace (i.e., allowing you to maintain your race pace), more stability and muscle endurance to maintain form for longer and increased economy at the molecular level (aka, you'll use less oxygen at the same pace). For sub-threshold work (85 percent of lactate threshold), he recommends training on softer surfaces that mimic the topography of your race. For faster paces, VO<sub>2</sub> max workouts and lactate threshold workouts, McGee suggests running for time (running 5x5 minutes at LT instead of 5x3 laps around a track) because it's physiologically and mentally easier on your body, and running hills. "Hills are a far better way to go as the mechanical stresses on the legs are so much greater on the track at flat speeds," he says. "An elite triathlete, true story, can do 10 by 200 meters on the track in well under 30 seconds (sub-4-minute pace), but only achieve 5:30 pace in a hill workout. These hills provide greater benefit, quicker recovery and much more safety than the track workout. Triathletes *must* do hills!"

### 8 You're not doing yoga.

Who has time for a fourth activity, right? But if you consider the various ways a regular yoga practice can make you a better triathlete—enhanced flexibility, balance, full-body strength, recovery, range of motion, focus—it's a worthy investment of your time. For triathletes in particular, the dynamic stretching of athlete-friendly yoga poses and properly designed yoga sessions can counteract the tightness and imbalances that come from daily workouts. Ready to hit the mat? *Everyday Yoga* (\$22, VeloPress.com) by Sage Rountree is a get-started guide to a home practice for athletes. Try it: Warrior 1 Flow

This sequence balances strength and flexibility in the legs and hips.



Hold each pose for several breaths then transition to the next pose. Repeat on the opposite side.



## 9 YOU'RE NOT MAINTAINING YOUR BIKE.

More specifically, your drivetrain. "When a chain is not properly cleaned and lubed with a high-efficiency lubricant, friction levels increase at the sliding surfaces of each chain link," says Jason Smith, the founder of Friction Facts, an independent testing company. "Our testing has shown just under a 5-watt swing between top-performing and poor-performing chain lubricants." What makes it worse is a dirty chain—simple road grit from multiple rides can add an additional 3 watts—so adding poor-performing lube to an already dirty chain can mean you're giving up about 8 "free" watts, Smith says. To prevent that, he recommends lubing before every training ride and cleaning periodically; for racing, clean the chain with a common rotary brush chain or ultrasonic cleaner and then lube.

In addition, Friction Facts has found that chain wear (aka elongation) shows friction increases an average of 2.02 watts per 1 percent of elongation. "The efficiency sweet spot for a racing chain is about 500 miles of use," he says. "As the chain becomes increasingly worn, the friction increases linearly." Since not everyone can afford to replace their chain every 500 miles, designate a training chain and racing chain, and swap accordingly with a quick link. "A little attention to the drivetrain is an easy and inexpensive way to get several extra watts," Smith says.

Friction Facts, an independent testing company, found these friction increases based on different conditions, all within the same ride.

Condition	Increased chain friction levels
Light road grit	1–3 watts
Rainy	5–6 watts
Muddy	10–12 watts



### 10 You're cutting corners.

Not doing simple things like warming up, cooling down or strength work will keep you from maximizing your workouts and leave you more prone to injuries, says coach Ricci. He recommends a warm-up before every workout—especially for harder efforts, such as intervals—and for each sport. For the swim, start with some easy laps alternating perfect swim technique with drills; for the bike, start in an easier gear; and for running, do some easy running with a quick cadence and include drills. Being time-crunched is no excuse—if you're jumping into a main swim set, you could use the first few intervals as a kind of "extended warm-up," and then try to hit your paces at the middle and toward the end of the workout. For the bike, Ricci advises adding in some one-minute 100 RPM efforts to warm up quickly. And on the run, where it's most crucial, cut down the time between intervals, cut the workout short on intervals or use an abbreviated cool-down (like half a mile instead of a full mile).

In addition, don't neglect strength work: "When you're working out in three sports, you need to be careful of all the moving parts, which isn't easy," Ricci says. "Working on your limiters, mobility and strength are all important." He recommends out of season, lift three times per week with core work and mobility every day. During the race season, strength train twice a week, with mobility and core work every day.



### 11 You can't turn off the internal chatter.

Triathlon will challenge you physically and mentally like nothing else. You have to take yourself to the edge of your potential to have that breakthrough performance. When the legs and lungs are screaming, a lot of us conjure up motivational phrases or words to battle through the burn. But Ironman legend and coach Mark Allen has another way. The winner of the epic 1989 Iron War duel with Dave Scott says that when [stuff] gets real, sometimes the best thing to do is silence any internal dialogue. Allen believes that in the toughest moments it's almost impossible to find a positive thought, and even if you do tell yourself something positive, you're probably not going to believe it. "I find it much more powerful to practice getting into that quiet place where you really don't have any thought," he explains. "You're aware and alert and responding to what's going on, but you're not assessing or judging it." Allen says you've got to train your brain to embrace the quiet. "When you're out training and that chatter is going on, take a breath and let it go," he says. "It's one very simple technique. And then five minutes later when it starts again you do it again. And you do it again, and again."



## 12 You're too competitive.

A competitive streak can serve you well in any athletic pursuit, but if you insist on riding at the front of *every* group ride, not leaving the pool until your lane neighbor does, and hot-stepping your run partner in each workout, you're

only digging yourself into an overtraining hole. True confidence and fitness gains come from sticking to your training plan and prescribed pace regardless of what people around you are doing. A training team or tri club atmosphere can provide a valuable social network and support system, so leverage the motivational fuel those outlets provide instead of trying to prove your part in any perceived hierarchy. Channel that energy for a race-day throwdown, where your splits can do the posturing.



## 13 You're choosing the wrong races.

When it's snowing outside, a warm, tropical triathlon might sound like the ideal race-cation, but is that the right course for you? "It's fun and challenging to try something totally different and get new experiences," says multiple Ironman champion Heather Wurtele. "But be realistic in what types of races the constraints of your daily training environment will best prepare you for." For example, she takes her

tall frame, bike strength and preferred cooler, dryer training conditions into consideration when choosing races—the Ironmans she's won (St. George, Lake Placid and Coeur d'Alene) have all been races that play to her strengths. "Let's face it—triathlon is a lot more fun when you enjoy the day and feel like you can put your best performance forward," she says. Wurtele recommends looking at all the factors of a race (terrain, climate, time of year, etc.) and doing an honest assessment of your strengths before signing up. "Picking races that cater to those is definitely going to help you have the best race, perhaps even if the destination of the event isn't as exotic as you'd like," she says.



## 14 YOU'RE TOO HAIRY.

True story: Pro triathlete Jesse Thomas was testing various aerodynamic setups in the Specialized wind tunnel and was curious about any potential watt savings from shaving his legs. He did a test pre-shave and then again post-shave. The savings? A very surprising 15 watts. While few people rate as highly as Thomas on his self-conceived "Chewbacca Scale" and will likely not see that kind of aero differential, there *could* be some drag savings, guys. In a sport where many of us won't hesitate to pony up hard-earned dough for the lightest, most aero iteration of most any piece of gear, a razor could be the cheapest possible investment. Another caveat to leg shaving relates to the placebo effect: You've gotta think you're fast to go fast.



## YOU'RE RACING TOO MUCH.

A lot of triathletes pinball around the racing circuit, spending the season bouncing from one race to another without a dedicated training build into a goal race. Even the pros fall victim to this practice (see Tim DeBoom's column on page 24). While this casual/haphazard approach to racing may work for some (i.e., the

casual competitor), most of us will see the most benefit from targeting an "A" race and working backward from that event date to build out a training and racing schedule that will set you up for your best performance on the day. An experienced coach can help guide your season planning and advise you on which rac-

es you can realistically "train through"—meaning you are not altering your big-picture training schedule too much to accommodate race day—and which races would be a detriment to the end goal. Ask yourself: Is your race calendar overburdened, or do you have a clear and focused path to your next PR?



### 16 You don't know your "why."

There's nothing wrong with racing triathlon without thinking too hard about the reason behind it, but "to stay in shape" or "to meet like-minded people" won't get you out of bed at 5:30 a.m. three days a week all year long. However, "the more connected you are to the real reason, the more powerful it becomes as a source of motivation and emotional control," says Simon Marshall, a sports psychologist who runs Braveheart Coaching with his wife, three-time XTER-RA world champ Lesley Paterson. "The strongest motives are intrinsic and fully integrated into who the athlete is as a person—whether this is an extension of their value system, their self-identity, pure enjoyment or what they see as important in life," he says.

Paterson, for example, is almost exclusively motivated by a sense of freedom that comes with hurtling through nature during off-road triathlons. Some are motivated by a desire for self-improvement (to see how far they can push themselves); for others, it's about refusing to give in to life's circumstances, such as illness, trauma or grief. To find a deeper purpose for your racing, Marshall suggests this thought experiment: "You are 100 years old, you have one minute to live and your great-grandchild asks you, 'What should I do with my life?' What would you tell them? That's what's important to you—connect your triathlon to that."

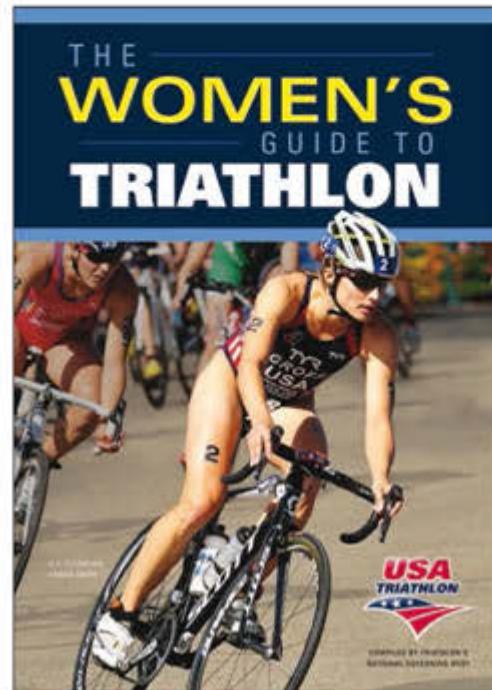
## 17 YOU'RE NOT USING TECHNOLOGY TO YOUR ADVANTAGE.

If you only train and race "by feel," you're missing out on a huge piece of your performance potential. Training with technology can provide you with confidence (in knowing that your training isn't going to waste), quantification of your improvement and help with pacing, says Hunter Allen, co-writer of the book *Training and Racing with a Power Meter*. "Knowing that 100 percent you are training in the right physiological zone makes all that hard work easier," he says. "And without data, you don't really know if you're improving: You might go faster at a race, but was it because there was a tailwind and you had faster wheels? Or your hard work?" The two biggest limiters to using technology are price and lack of knowledge—it's an easy sell, though, once you understand the benefits, says Allen, who's also the CEO and founder of Peaks Coaching Group in Bedford, Va.

If you'd like to become more tech-savvy with your training, the more economical option is to start with a downloadable GPS watch, which will give you pace and heart rate, two key metrics for triathletes. If the watch is ANT+ compatible, even better—it'll allow you to add a power meter later if you want (Allen recommends the Garmin Forerunner 910XT or 920XT, as it offers the best value and works for all three sports). If you have a bigger budget, consider investing in a power meter. "It contains pretty much all the metrics you need in training effectively, from power to cadence to GPS to heart rate," he says. When deciding which one to choose, consider how you'll be using it—there are crank-, pedal- and hub-based options and a wide range of installation ease (helpful if switching between bikes), features and prices. To analyze your data, he recommends TrainingPeaks WKO4 software—"the best software package available to analyze all three sports and keep it all nice and tidy at the same time." ■



# THE ONE GUIDE EVERY FEMALE TRIATHLETE NEEDS



*The Women's Guide to Triathlon*

By USA Triathlon

\$21.95, paperback, e-book

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**HUMAN KINETICS**

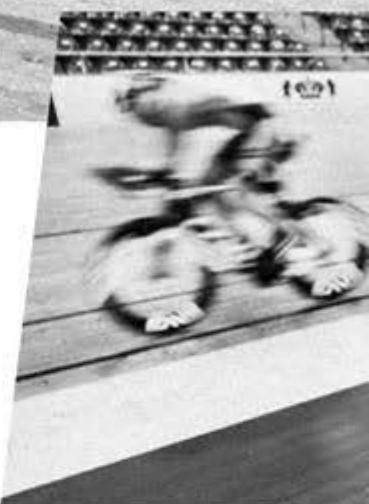
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# YOUR AERO EDGE



We followed four professional triathletes on their hunt for watts at the Los Angeles velodrome. Take what they learned to make you and your bike more aerodynamically efficient.





An aerodynamic focus is not just for the pros and the super tech geeks—age-groupers of all levels can benefit from getting the most speed out of their equipment. Historically, the wind tunnel has been *the* standard for aerodynamic testing, but a new option—the Track Aero System at the Velo Sports Center (aka the LA velodrome)—has allowed athletes to test drag in a more real-life riding scenario. ¶ The Velo Sports Center holds the largest indoor velodrome in America, and bike fit specialist Jim Manton runs his Retül fit studio and aerodynamic testing business, ERO Sports, out of the facility. Combining the fit process with the Track Aero System (developed by an engineering start-up out of Montreal), Manton can measure, in real time, how much drag you, your bike and your equipment are creating in various scenarios. ▶

BY JENÉ SHAW  
PHOTOGRAPHS BY MATT HARBICHT



## CASE STUDY

Before the Ironman World Championship in 2013, pro (and eventual second-place finisher) Luke McKenzie worked with ERO to find extra speed in Kona. They tested his fit, equipment and clothing, and one of his biggest changes was to switch to a sleeved tri suit. With the combination of changes, "we predicted it would save him 7 minutes over the course of an Ironman," Manton says. "He came out of the water at the same time as Faris Al-Sultan, and they both averaged 280 watts. It was 4 watts per kilogram and Luke went 7:43 faster. The only way you do that is if you're more aerodynamic."

# T

he complicated algorithm used to determine a rider's coefficient of drag (CdA) involves more than 20 calculations that take a host of variables into account, but the main objective is simple: Find more watts.

"We're looking for free speed," Manton says. "With a lot of people, their equipment is actually making them slower. So if we can find them the positions or equipment to make them go faster for very little money, that's going to help them do better, get on the podium, or do whatever they're looking to achieve."

### WHY THE TRACK?

The wind tunnel keeps riders in a fixed, stationary position. Although it has a lot of benefits—mostly in terms of manipulating the direction of airflow (or yaw angle, in aero speak)—it's not as realistic for riding as if you were on a road. Plus, testing in a wind tunnel is a pricey endeavor (upward of \$500 per hour). The velodrome is slightly more affordable (a pre-test position analysis plus two hours on the track is \$700), but its real advantage is that it's a step closer to what actual riding feels like.

### HOW IT WORKS

Every athlete starts with his or her bike on the trainer to get a sense of various fit ranges. The Retül fit system captures angles while pedaling, and Manton uses those numbers to get an idea of what he might want to tweak once out on the track.

After some practice laps to get used to the 42-degree banked velodrome, riders start with a baseline test, which future data is compared against. Each "run" is about 10–12 laps or a 3K, ridden around half-Ironman race pace. Manton or a member of his team will change one small thing at a time, and have athletes go back out to see how it affected the watts. They're looking to see how much power it takes to go a given speed. If it takes 250 watts to go 20 mph, for instance, and then a small change sees you only using 240

*"If we can find [athletes] the positions or equipment to make them go faster for very little money, that's going to help them do better, get on the podium, or do whatever they're looking to achieve."*





# ERO



watts to go 20 mph, that equals a change in being more aerodynamically efficient. Your drag is never constant, so they average the laps and throw out the highs and lows.

## WHO SHOULD TEST?

“Anyone who is serious about getting faster, no matter where they’re at,” says coach and aerodynamics expert Brian Stover, who has hosted multiple aero camps at the facility. “We’ve tested a lot of guys who are going to Kona and a lot of pros who want that extra edge, but the most relevant people are top age-groupers or people who are looking to reduce the amount of energy they’re putting out on the bike.”

## TRACK vs. TUNNEL

<b>PRICE</b>	\$700 for pre-test position analysis and two hours on the track	\$500 per hour, no fit included
<b>YAW ANGLE</b>	Fixed at zero yaw	Easy to manipulate varying degrees of yaw
<b>FEEL</b>	Like riding on a road	Like riding on a stationary trainer
<b>DATA</b>	Feedback after each lap	Results after each trial



## ON THE HUNT FOR MORE SPEED

Earlier this season, coach Paulo Sousa brought four of his pro athletes—Heather and Trevor Wurtele, Eric Lagerstrom and Magali Tisseyre—to the velodrome to test various fit and equipment choices. His academic background is in aerodynamics, so he was interested in gathering some objective data that could potentially make a difference in his athletes' performances.

"I like to focus on the 97 percent of what brings us performance, which is doing our job every day and focusing on that part of athlete development," he says. "I felt that this would be an aspect where we could explore a bit of the detail. Getting a lot of basics of good aero is easy, but to get down to the details, you really need to do some testing."

Each athlete had his or her own goals and objectives for the aero session. At such a high level, the aero testing often serves as a confirmation that an athlete is doing everything he or she can. Here's what each pro found.



**HEATHER WURTELE**

**QUICK STATS**

6x Ironman champion,  
12x Ironman 70.3  
champion, 2015  
Ironman 70.3 North  
American champion

**MAIN TESTING**

**OBJECTIVE**

Current sleeved race  
suit, hydration system,  
seat height

**FINDINGS**

Raising her seat 3mm  
saved her more than 7  
watts over her baseline.  
And her current sleeved  
suit, which Manton  
originally thought was  
too baggy, proved  
to be the right choice  
over both a sleeveless  
two-piece and smaller  
one-piece sleeved suit.

**PERSONAL**

**TAKEAWAYS**

"I think it's  
advantageous to figure  
out how to be the most  
aerodynamic I can be.  
And as compared to  
the wind tunnel, it's sort  
of a real-life situation,  
and you're moving on  
the bike with an actual  
pedal stroke. A 3mm  
change in saddle height  
saved a significant  
amount of watts—that  
was something small  
that had a significant  
impact."



**ERIC LAGERSTROM**

**QUICK STATS**

2015 Escape from  
Alcatraz champion

**MAIN TESTING**

**OBJECTIVE**

Minor position changes,  
race gear, helmets

**FINDINGS**

Switching to the Louis  
Garneau P-09 helmet  
was an 8-watt savings  
over his original setup.

**PERSONAL  
TAKEAWAYS**

"The helmet was really  
the only thing that  
made a difference. In  
terms of my body, I  
was in the best position  
I could've been in. It  
would've been great  
to walk away with,  
'Oh 40 more seconds!'  
but it's good to know I  
haven't been giving up  
much time. The biggest  
takeaway is peace of  
mind that I've turned  
over every stone and  
that there's nothing else  
I can think about ... and  
I can go into the race  
with a completely quiet  
mind that I have the  
best setup that I possibly  
can."



## SPEED SECRETS

Although aerodynamics are incredibly individual to each rider, there are common findings that have come out of the velodrome tests that you can use to uncover more speed.

### Prioritize a bike fit

Manton says he can get most people 85 percent of the way there aerodynamically simply by giving them a proper bike fit. Before you even dream of setting foot on the track, go to a qualified fitter to find your ideal position. "The average age-grouper comes in with a horrible fit," Stover says. "They're way too low or way too high in the front. You see a lot of athletes who, by 100 miles into the bike ride, are riding completely upright, and that's just

indicative of a bad fit and/or lack of training."

As a triathlete, you have to bear in mind that whole running thing afterward, not to mention the need to digest nutrition while riding. An aerodynamic fit that winds up being too uncomfortable halfway through the bike course defeats the purpose.

Lower may seem more aggressive and aerodynamic, but going *too* low will have an adverse effect. "A fit should be comfortable," Stover says. "If you get a fit that's more aggressive, it may take some getting used to, but an aero fit should be comfortable off the bat. There have been many instances where we've actually gone up in the front and have seen a reduction in drag."

### Keep your forearms flat or slightly angled up

By now, the ERO Sports team has a very large general sense of what works for most triathletes, with the Retül data to back up the optimal angles for various positions. A lot of athletes who have been through their fitting process leave looking the same—they all have a 10–15-degree up angle on the arms. "It's more comfortable and more aerodynamic," Manton says. "Anytime we see people with their wrists below their elbows it's almost always slower."



### Buy an on-trend and well-tested helmet

Any aero helmet will be faster than a traditional helmet, but from there it can be pretty individual based on your head shape. "The difference between buying an aero helmet versus *the* aero helmet for you could be two seconds per kilometer faster, in some



## WANT TO DO YOUR OWN AERO TEST?

A one-person test is \$700 and includes:

- » Pre-test position analysis using Retül
- » Two hours of testing on the LA Velodrome with multiple equipment and position changes
- » A comprehensive results report
- » Photos and videos

[Ero-sports.com](http://Ero-sports.com)

cases more," says Stover. Ideally you can try one on, but if not, he suggests buying a helmet that tests well consistently. Two helmets that they've seen do well for the majority of triathletes are the Giro Advantage 2 (\$165, [Giro.com](http://Giro.com)) and the Louis Garneau P-09 (\$350, [Louisgarneau.com](http://Louisgarneau.com)).

### Ditch the shield and wear sunglasses

Many aero helmets come with an optional shield attached. Based on data from many tests, Manton says to take it off and put on your own shades. "Visors on helmets are almost always slower than just wearing sunglasses," Manton says. Pro Magali Tisseyre tested this theory during her time at the velodrome and confirmed that her sunglasses plus helmet combo saved watts over the visor option.

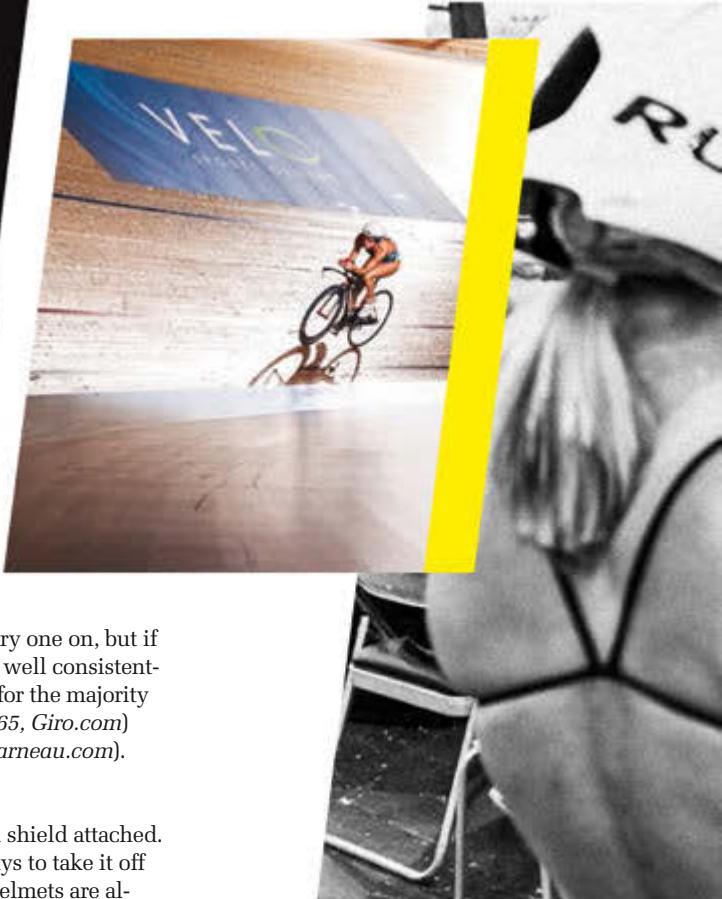
### Race in a tight, sleeved tri suit

Sleeved suits are starting to become more ubiquitous in the pro ranks as of a couple years ago, and that is starting to trickle down to the age-group field too. "Clothing is the revolution in aerodynamics right now," Manton says. "We feel like we've had a lot to do with that, and you'll see all the triathletes—age-groupers and pros—wear sleeved suits, and a lot of that has come from our testing. We've realized how much speed there is to be gained from that, and generally they provide UV protection and keep you cooler, so there's a big plus there."

Even if you aren't quite ready to make the jump to sleeves, operate under Manton's notion of "skin is slow, wrinkles are worse" and make sure your tri suit isn't too baggy or flapping in the wind. He suggests to size down. "One thing we found out with testing here and at the wind tunnel, was to size down with a top and it's automatically faster," he says.

### Stop carrying so much stuff

When you're on a bike course for multiple hours, yes, you need a lot of fuel and hydration to keep your body going. But a lot of triathletes put way too much stuff on their bikes—two bottles on the frame, two off the back, CO<sub>2</sub> cartridges, tires, a rolling buffet, etc.—and, without realizing it, they're hurting themselves aerodynamically. "You've got an aid station every 10 miles for an Ironman—you don't need 16 gels on your top tube," Stover says. As far





## TREVOR WURTELE

### QUICK STATS

2013 Ironman Canada champion, 2012 Ironman 70.3 New Orleans champion

### MAIN TESTING OBJECTIVE

Current sleeved race suit, helmet, position

### FINDINGS

His sleeved race suit worked well over a sleeveless option; extending his arms out farther narrowed his shoulders and flattened his back making for almost a 10-watt savings, which would amount to more than 4 minutes saved over the course of an Ironman bike leg.

### PERSONAL TAKEAWAYS

"We're always adjusting small things, from training methods to body position. It was good to come and see that some of those tweaks make an instant real-world difference in gaining a few seconds. It's nice to be in a velodrome and actually be able to ride the bike while making those position changes. With the slight change in position, and if I could keep my frame clean and free of bottles, I would save 4–5 more watts. Of course, those are restrictions you run into with long-course triathlon. There has to be a balance between aerodynamics, comfort and the need to carry calories and fluid."



## MAGALI TISSEYRE

### QUICK STATS

2x Ironman 70.3 Worlds podium (2009, 2010), 13x Ironman 70.3 champion

### MAIN TESTING OBJECTIVE

Angle and reach of aerobars, hydration systems and Rudy Project Wing 57 helmet with or without visor—during hot races, Tisseyre chooses not to race without the visor.

### FINDINGS

What paid off the most was riding with sunglasses as opposed to the visor, going lower in the front (by taking out some spacers under the elbow pads) and switching to ski bend extensions, and making her position more narrow.

### PERSONAL TAKEAWAYS

"It was cool to go to the velodrome and see what it's like to ride on a track. I feel like whatever position I'll adopt when I'm working harder at a race is closer to what I did during the testing on the track than in any fixed position. I had done some wind tunnel testing before and it is interesting to try something different and compare."

as hydration goes, "there are a lot of things you can do with a zip tie and you don't need to spend \$80 on a fancy bottle," he says. He suggests hiding a bottle between your forearms, which is almost always faster than having something in the wind (like on your frame). He did mention, though, that some frames work really well with the integrated bottle on the down tube, such as the Felt IA with the Torhans Aero Z BTA bottle.

### Put a bottle behind your saddle

In the many variations of hydration setups, Manton says there's one thing that works well most often: One bottle directly behind the saddle. Retül specialist and aerodynamics consultant Ivan O'Gorman furthers that advice by saying that anything you put behind the saddle needs to be included in the body mass that's in front of it. "Eighteen inches behind the saddle creates dirty air that has to rejoin after," he says. "It needs to be tight, clean and close."

### Ladies: Braid your hair and wear longer shorts

It's a simple change, but braids typically lie flatter against your neck versus a flapping ponytail. Better yet, suggests Stover, tuck your ponytail into your helmet and out of the wind. And, although many women are opposed to it for aesthetic and comfort reasons, a lot can be gained from wearing longer shorts that cover the majority of the thigh. ■

TO SEE A BEHIND-THE-SCENES VIDEO DETAILING OUR VELODROME TESTS WITH THE PROS, VISIT [TRIATHLETE.COM/VELODROME](http://TRIATHLETE.COM/VELODROME).

# BETTER

# *Together*



S	B
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BY SUSAN LACKE



THIS MOTHER-SON  
TEAM IS PAVING  
THE WAY FOR  
OTHER TRIATHLON  
FAMILIES

Megan Beer started running in 2010. The 37-year-old single mother had difficulty finding childcare during her workouts, so she put her son Adam in a jogging stroller and logged the miles in and around their hometown of Owatonna, Minn.

"Had I known how much he'd enjoy it, we would have started much earlier, when his stroller wasn't so huge!" Megan laughs.

Adam, who is blind, non-verbal and autistic as the result of a premature birth at 23 weeks, was 8 years old when he began joining his mom on runs. That year, the team ran their first 5K together, each pushing the other: "We started in the back with the regular strollers, but Adam kept clapping (his sign for 'more'), requesting to go faster, so we did."

At that first 5K, both mother and son were bitten by the racing bug. Megan signed up for more races and longer distances with her son. When someone suggested Megan take up triathlon, Adam came along, too.

"I didn't have care arranged for him one day, and when I told my triathlon group I couldn't meet them for practice, Dave [Chabot, Megan's boyfriend] suggested I bring him. On the spot, he created a harness for one of our kayaks so I could pull Adam during the swim portion," says Megan. "My triathlon friends swam right with us. We were all constantly watching Adam to make sure he hadn't decided to join us in the water and that he was enjoying the ride. He loved it!"



After a few practices, Adam expressed his desire to go with his mom every time she trained, protesting loudly when she went for a workout without him. With the help of her triathlon group, Megan arranged to enter a local triathlon with Adam. On race day, Team Beer arrived with two kayaks, a bike trailer, stroller and a crew of friends and family.

"I thought we'd just go quietly participate so I could give Adam the experience of race day," recalls Megan. "I was overwhelmed by the support we encountered. By the end of the triathlon, many of the athletes knew his name, cheered for him and encouraged us through the event."

Even without the ability to speak, it's clear Adam loves racing. He breathes excitedly and smiles big before the starting gun, and if his mom's pace slows, Adam hits the sides of the stroller to encourage her. He'll proudly show off his race shirt and finisher medal.

For Megan, medals pale in comparison to the gift the triathlon community has given her: "While I had lived in town for seven years, Owatonna became 'home' for Adam and me the summer we started doing triathlon, and I became more myself than I had ever been. Our life can be quite lonely and isolating. There are no soccer games, swim meets, play dates, birthday parties, summer camps or sleepovers—none of those are experiences Adam would enjoy. Our friends, family and triathlon community remind us that we are not alone."

It's a gift Megan now pays forward. Her triathlon club, based out of Straight River Sports in Owatonna, has become a place for families to experience the same joy Adam and Megan have found through endurance sport. A child with Down syndrome rides with his parents and is the star of a yearly cycling event to raise money for the National Association for Down Syndrome. Another child with Fragile X syndrome competes with his father in many of the same events as Megan and Adam.

The owner of Straight River Sports, Ann Paulson, has watched this evolution of the triathlon group with immense pride: "Because of the visibility of Megan and Adam, we now have a network of families who use physical activity to deal with the stress of raising a child with special needs. We are able to network with these families and give them names and numbers of people who are in the same situation or have 'been there, done that. I get it' advice for them. As the local bike shop, we have also been able to modify and build special-needs bikes for these kids in order for them to be able to participate in family rides and events."

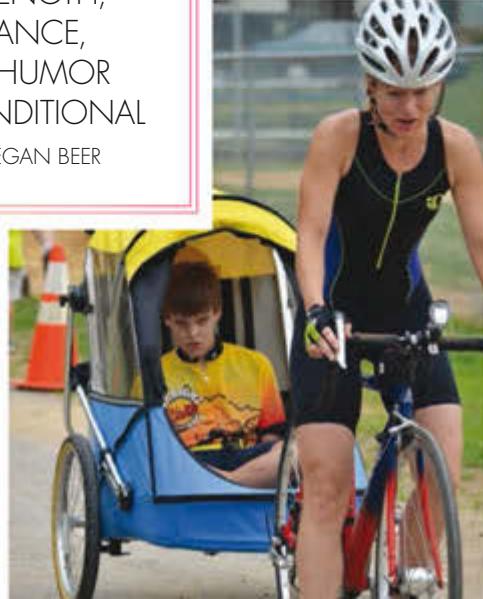
The sight of Team Beer enjoying race day together is heartwarming—spectators are sometimes moved to tears when they see Megan carrying her 90-pound son through transition, and watching the two giggle as they toast their finish with post-race libations (butterscotch malt for Adam, Bloody Mary for his mom) is a picture of pure joy.

"Adam gives us perspective on what is truly important in life," Paulson says. "It's a humbling moment to see your good friend stumble in transition while carrying her 12-year-old son in her arms like a small child. Still, Megan doesn't want anyone to see them as a pity case. She's a firm believer that we all have our own challenges—hers is just more visible."

What is the best thing about being Adam's mom? "Simply, Adam is my hero," Megan says. "When I think about what he has overcome to not only survive but thrive with the consequences of his prematurity, I am amazed and humbled by his strength, perseverance, patience, humor and unconditional love." Megan smiles before continuing: "He also gives the best squeeze hugs in the whole world."



"ADAM IS MY HERO.  
... I AM AMAZED  
AND HUMBLED  
BY HIS STRENGTH,  
PERSEVERANCE,  
PATIENCE, HUMOR  
AND UNCONDITIONAL  
LOVE." —MEGAN BEER



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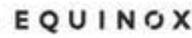
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## CYNTHIA STEELE

She's a wife and mom to three thriving kids. She's a career woman, with a hectic schedule and far too many frequent flier miles. She lost 50 pounds through sport and gained a community fueled by a common passion. She's a health and fitness ambassador, plus a prolific blogger. She's a part of the Challenge Family. Learn more about Cynthia's Athlete's Journey at [challenge-familyusa.com/cynthiasteele](http://challenge-familyusa.com/cynthiasteele)

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# SWEET 'N SALTY

From artisan chocolate to coffee concoctions, salt is the perfect complement to any sweet treat. And now, the flavor trend has officially infiltrated the sports nutrition market. We put five salted caramel-flavored products to the triathlete's taste test. **BY BETHANY LEACH MAVIS**

## POWER CRUNCH PROTEIN ENERGY BAR

We appreciate the wafer-like, crispy texture of this bar, as high-protein bars tend to be very dense. It has a very sweet maple-like flavor from its caramel coating, which masks the 13 grams of protein well, but tasters also noted a sugary aftertaste. Each bar contains 205 calories, 320 milligrams of electrolytes (sodium and potassium) and 9 grams of carbs. \$1.79, [Power-crunch.com](http://Power-crunch.com)

## BONK BREAKER ENERGY BARS

The 10th flavor in the company's line of energy bars, salted caramel has a great taste with a chewier, more moist texture than other Bonk Breaker bars. Made with all recognizable ingredients, including gluten-free oats, cashew butter, flax seeds and peanuts, it has a toffee-like crunch. Each bar contains 260 calories, 7 grams of protein, 330 milligrams of electrolytes (sodium and potassium) and 38 grams of carbs. \$2.50, [Bonk-breaker.com](http://Bonk-breaker.com)

## GU ENERGY GEL

One of our editors recently tested this gel flavor during a marathon, and its saltiness went a long way in battling flavor fatigue. For those with a gel aversion, think of it as melted caramel candy (which is how it tastes). Each packet has 125 milligrams of sodium, 40 milligrams of potassium, 22 grams of carbs and 20 milligrams of caffeine, derived from green tea. \$1.45, [Guenergy.com](http://Guenergy.com)

## KIND HEALTHY GRAINS POPPED

The newest Healthy Grains bars were created to be reminiscent of popcorn, with the addition of a sixth whole grain, sorghum, to add a "pop." The bars are more chewy than crunchy, and have a pleasantly sweet flavor, though taste testers didn't pick up much salt. With 20 grams of whole grains, 140 calories and 3 grams of protein, it's a smart snack choice. \$3.99 for box of five bars, [Kindsnacks.com](http://Kindsnacks.com)

## NATURE VALLEY NUT CRISP BARS

These nutty snack bars were the winner in the taste test as they deliver a satisfying combo of salt and caramel flavors with a light, crunchy texture from the mix of roasted peanuts, sunflower seeds and pumpkin seeds. The caramel yogurt-like coating on the bottom keeps them from crumbling. Each bar has 140 calories, 6 grams of sugar and 4 grams of protein. \$4.19 for box of six bars, [Walmart.com](http://Walmart.com)

*Four ways to use ...*

# CHIA SEEDS

Chia seeds are a great source of omega-3s and easier on the tummy than flax seeds because they don't need to be ground before eating. They also aid hydration and reduce hunger and food cravings by keeping you feeling full with about 10 grams of fiber in a one-ounce serving. Best known for appearing in baked goods, chia seeds can complement a variety of dishes, from sweet to savory. **BY JESSICA CERRA**

## ◀ Chocolate-Coconut Chia Seed Pudding

**Rich chocolate and creamy coconut milk, thickened with chia seeds, make a decadent pudding. Top it off with chocolate bits and coconut shavings for an indulgent touch.** In a bowl, whisk together 1 1/4 cup vanilla coconut milk, 1/4 cup chia seeds, 3 tablespoons raw cacao powder (or unsweetened baking cocoa), 2 tablespoons pure maple syrup, 1 tablespoon brewed coffee and 1/4 teaspoon sea salt. Cover and refrigerate for at least 4 hours, and up to overnight. Optional: Top with dark chocolate and toasted coconut shavings. Makes two servings.



## ▲ Creamy Lemon Pasta Salad with Fresh Summer Veggies

**This creamy, zesty pasta sauce, with chia seeds as the unexpected ingredient, will wow any crowd. Combined with a healthy helping of fresh seasonal veggies, this recipe will be a go-to on your summer menu.** In a bowl, whisk together 1 1/2 cups skim ricotta, 1/3 cup chia seeds, 1/4 cup light sour cream, 1/4 cup fresh grated Parmesan cheese, 1 teaspoon sea salt, 1/2 teaspoon freshly cracked pepper, and the juice and zest of 1 large lemon. Cover and let sit in fridge for at least 4 hours, and up to overnight. Boil 1 pound of your favorite pasta salad pasta with 1 teaspoon salt, until al dente. Drain and immediately transfer to a large bowl. Toss with the ricotta-chia mixture until thoroughly coated. To the bowl, add 2 diced carrots, 1 cup chopped sugar snap or English peas, 1 diced summer squash, 1 cup halved cherry tomatoes, 1 tablespoon (each) freshly chopped basil and flat-leaf parsley. Toss until well combined. Optional toppings: fresh lemon zest, fresh basil, fresh parsley, freshly grated Parmesan, or toasted pine nuts.

*Jessica Cerra is the owner of Fit Food by Jess, a private chef and catering company in Encinitas, Calif., and the co-founder of Harmony Bar. A former professional Xterra triathlete, Cerra now races for Twenty16 Women's Professional Cycling Team. Find 150 more of Cerra's recipes online at [Triathlete.com/recipes](http://Triathlete.com/recipes).*



#### ► Quinoa-Chia Breakfast Parfait

Quinoa is a delicious breakfast option and also adds a substantial amount of protein. Chia seeds can be cooked right into quinoa (or even rice or oatmeal) and add a filling amount of fiber to this colorful parfait. Also try adding chia seeds to quinoa, rice, barley or farro for lunch or dinner. Bring 1 cup of quinoa,  $\frac{1}{4}$  cup chia seeds, 1 teaspoon sea salt, and 2 cups of water to a boil in a small pot. Cover and reduce heat to simmer for about 10 minutes until the water is absorbed and the quinoa is fluffy. In a small bowl, toss together 2 cups of berries, or your favorite cut fruit (grilled fruit is amazing in the summer). To make 4 servings, place  $\frac{1}{2}$  cup Greek yogurt in the bottom of 4 parfait dishes. Top each with  $\frac{1}{4}$  cup of the fruit mixture and  $\frac{1}{4}$  cup quinoa. Repeat this step. Sprinkle your favorite nuts over the top, and use a drizzle of maple syrup, honey or agave for sweetness.

#### ► Chia-Panko-Crusted Shrimp

Crispy, crusted shrimp, with a healthy touch of chia seeds, is baked in the oven for a lighter version of a classic comfort food. Serve up with your favorite dipping sauce or salsa. Set up this dredging station for 1 pound of peeled and deveined **jumbo shrimp** (tails on): one plate with 2 tablespoons **whole-wheat flour**, one plate with 2 **eggs**, whisked, and one plate with a mixture of 1 cup **whole-wheat panko breadcrumbs**,  $\frac{1}{4}$  cup **chia seeds**, 2 cloves minced garlic, 2 tablespoons **cumin**, 1 teaspoon **paprika**,  $\frac{1}{2}$  teaspoon (each) **salt** and **pepper**. Heat oven to 450 degrees, and prepare a baking sheet with foil and non-stick cooking spray. Cut shrimp where veins were removed so they will be able to stand with tails facing up. Dredge shrimp in the flour, then eggs, then panko mixture (coat thoroughly). Stand shrimp up on a baking sheet, and bake for 10–12 minutes, until golden brown.



Starting with the premise of "why do the foods we love so much have to be so bad for us?"

**UNREAL** candy set out to revamp your favorite sweets—starting with M&M's and Reese's—into something that was void of the bad stuff like corn syrup and artificial flavors. Not only did they nail the ingredients list (fair-trade cocoa, coconut oil, agave, pure vanilla, to name a few), the taste is, well, real, and trumps traditional candy. With peanut butter cup flavors like milk chocolate crispy quinoa (our fave), and dark chocolate coconut, it took one bite to become addicted. Plus, they're surprisingly low in sugar and are gluten-, corn- and soy-free. *Getunreal.com* —JENÉ SHAW



LOVING  
this month!



# HEMP, HEMP, HOORAY!

The cannabis cousin can get you high—on good nutrition, that is. **BY MATTHEW KADEY, R.D.**

WHILE ONCE AN OBSCURE FOOD confined to hippie enclaves and badgered by constant pot puns, hemp is undeniably surging in popularity. Data from the Hemp Industries Association show that sales of hemp food have grown by about 24 percent in recent years. You can now find sachets of hemp seeds in megamarts, hemp protein in smoothie joints and hemp-infused granola bars in office vending machines. And that's a good thing considering that the various guises of hemp food offer athletes plenty of nutritional benefits that prove they are worth the hype. Here's how to take advantage of the high-flying properties of hemp. (Sorry, we couldn't resist.)

## Hemp seeds

Also called hemp hearts, these delicious little nuggets taste like a lovechild of sunflower seeds and pine nuts. But it's their nutritional résumé that really sets them apart. Most notably, they deliver more muscle-friendly protein than that found in

other seeds like flax and sunflower—about 10 grams in a 3-tablespoon serving. Their cornucopia of nutrients also includes laudable amounts of immune-enhancing zinc and energy-boosting iron. ***Sneak more in:*** *Salads, yogurt, soups, roasted vegetables and oatmeal will become instantly better with a generous sprinkle of these super seeds.*

## Hemp oil

Made by squeezing hemp seeds to the point where they release their verdant juice, hemp oil has a not unpleasant vegetal flavor making it a nice alternative to olive oil. Nutritionally, hemp oil delivers an ideal ratio of essential omega-6 and omega-3 fatty acids that helps fight inflammation in the body, which offers up heart-health benefits and may hasten exercise recovery.

***Sneak more in:*** *The delicate fats in hemp oil should not be heated so instead use it in salad dressings, pesto and dips.*

## Hemp protein powder

Offering up a concentrated source of plant-based protein to support your training, hemp protein powder is made by milling hemp seeds into a powder. Based on production methods, brands will contain various levels of protein and dietary fiber. Since hemp is considered a so-called “complete protein” because it contains all the essential amino acids, it is useful for repairing and building lean body mass in both vegetarians and carnivores.

***Sneak more in:*** *Whirl it into your smoothies or try mixing hemp powder into pancake or baked good batter for a protein boost.*

## Hemp milk

Up-and-coming hemp milk is gleaned by blending hemp seeds with water to produce a dairy-free milk alternative with earthy-nutty flavor. Lovers of almond milk should take note that the hemp variety contains higher amounts of protein and omega fatty acids. Most are also fortified with bone-building calcium. Still, consider opting for versions labeled “unsweetened” to keep your sugar intake in check.

***Sneak more in:*** *Use hemp milk to float your cereal in, as a liquid base for post-training smoothies, or mixed with cold-brewed coffee.*

## HIGH NOTE

Worried about suffering Taco Bell cravings after a hemp smoothie? Don't be. Hemp is a different variety of cannabis, so it doesn't trigger munchies or positive drug tests.

## tempting HEMP

*Seek out these products to power up on hemp.*



### Manitoba Harvest Hemp Pro 70

(\$30, [Manitobaharvest.com](http://Manitobaharvest.com)) A lofty 20 grams of high-quality protein to show your muscles some love.



### Nutiva Hemp Oil

(\$9, [Nutiva.com](http://Nutiva.com))

Cold-pressed from organic hemp seeds to maximize the nutritional goodness.



### Tempt Hemp Yogurt

(\$4.59, [Livingharvest.com](http://Livingharvest.com))

For a perfect post-workout treat, top this high-protein cultured delight with some granola. The fruit flavors contain actual fruit.



### Navitas Naturals Hemp Seeds

(\$7, [Navitasnaturals.com](http://Navitasnaturals.com))

Sourced from organic family farms in Canada, you'll always want to have a bag of these nutritious nuggets in your pantry.



### KIND Strong bars

(\$1.79, [Kindsnacks.com](http://Kindsnacks.com))

Hemp seeds help elevate the protein numbers in these delicious savory bars.



World Class Triathlete Laura Bennett

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# WORTH ITS SALT

As the temperatures rise, long-course triathletes can benefit from adding extra electrolytes to their race-day nutrition plans. **BY LAUREN ANTONUCCI, R.D.**

EVEN THOSE WHO PROCLAIM NOT to sweat much will feel the effects of sweating out water and key electrolytes during long, hot training sessions. If you're confused about exactly how much sodium you need and when, you are not alone—I get the same questions on salt and electrolyte supplementation from triathletes every year.

The bottom line seems pretty simple at first glance: Endurance athletes need to replace the fluids, carbs and sodium lost during endurance training and racing. Sports drinks contain both flavor (from sugar/carbs) and sodium (from various forms of salts) to help increase the

drive to drink and ensure optimal hydration.

Many triathletes will choose to alternate between sports drink and plain water (to take a gel or with solid foods on the bike, or to add additional fluid intake in the heat) and will therefore need to rely on supplemental salt.

## Why use extra salt?

It is possible to be both dehydrated (low in total body water) and hyponatremic (dilution of electrolyte sodium in blood, leading to swelling of cells). This is because for hours on end you sweat out not only water but also key electrolytes, including sodium. Countering that fluid loss by drinking plain water means you'll not only *not* retain the fluid as needed (because it doesn't contain the sodium needed for fluid retention) but you'll also further dilute the electrolytes left in the bloodstream.

The options at right provide electrolytes, not fuel, so consume them in addition to your carb-rich sports drink. Learn your sweat rate, choose a drink you like, and the rate you can realistically consume that drink during your race. Then add supplemental carbs and sodium appropriately, and practice!

## DO THE MATH

### 1 liter (32 ounces)

Typical triathlete fluid/sweat loss per hour

### 750-1000 milligrams

Amount of sodium athletes should replace per hour

### 110 milligrams per 8 ounces

Amount of sodium in a typical sports drink (or 440 milligrams per 32 ounces). Gatorade Endurance, which will be served on Ironman courses again in 2015, contains 200 milligrams of sodium per 8 ounces.

## BASIC ELECTROLYTE TABS



### Hammer Nutrition Endurolytes

80 milligrams of sodium and 50 milligrams of potassium per 2 capsules



### Hammer Nutrition Endurolyte Extreme

120 milligrams sodium, 75 milligrams potassium per capsule



### Thermolyte Meta-Salt

330 milligrams sodium and 85.2 milligrams potassium per serving

## EFFERVESCENT TABLETS



### Nuun Active

The brand says its tabs are absorbed more quickly, thanks to the effervescence. Many athletes like the subtle flavors (once dissolved in water).



### GU Hydration Drink Tabs

A new look and new ingredient: Gu recently switched from sorbitol to xylitol, as the latter has less chance of causing dreaded GI distress.

## OTHER



### BASE Performance Electrolyte Salt

This will be available on U.S. Ironman courses this year and comes in a small tube. You lick your thumb pad, pop the cap on the tube, put your thumb over the opening to coat your thumb with salt, then lick it off. You'll lose a little salt in the jostling, but the saltiness is a welcome flavor balance to sugary nutrition products. Each 20-serving tube contains 290 milligrams of sodium and 2.6 milligrams of potassium.



### The Right Stuff

This product is a "supercharged" electrolyte supplement developed by NASA. If you sweat a lot, take this before or during exercise, mixed with water.

A 20-milliliter serving provides 11,780 milligrams of sodium, so it's not to be taken lightly or quickly—sip it over time to prevent too much water from being drawn into the gut with such a high concentration of sodium.



### Gatorade Gatorlyte Electrolyte Powder

The powder comes in a single-serving pouch (which you can mix into a sports drink) and contains 780 milligrams of sodium and 400 milligrams of potassium.

■ TO FIND OUT HOW TO CONDUCT A SWEAT TEST TO DETERMINE YOUR SWEAT RATE, AND FOR EXAMPLES OF HOW TO APPLY SODIUM SUPPLEMENTATION TO YOUR RACE-DAY NUTRITION, GO TO [TRIATHLETE.COM/SODIUM](http://TRIATHLETE.COM/SODIUM).

Lauren Antonucci is a board-certified specialist in sports dietetics, three-time Ironman finisher and the founding director of Nutrition Energy in New York City.



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# SKIRT STEAK WITH ROASTED POTATOES AND SALAD

Eat clean after a tough workout with this protein- and nutrient-rich meal.

## INGREDIENTS

### For steak marinade

- 1 8-ounce skirt steak
- 1/4 cup olive oil
- 1 tsp garlic, chopped
- 1/4 tsp cumin
- 1 tsp cilantro, chopped

### For salad

- 1 cup baby arugula
- 1/2 cup blanched haricots verts (or green beans)
- 1/2 cup cherry tomatoes, halved
- 1 T thinly sliced green scallion

1/4 cup, each, sliced cucumber, sliced red onion, sliced zucchini

1 tsp, each, torn fresh parsley and torn cilantro

Lemon juice, to taste (about half a lemon)

Salt, to taste

Olive oil, to taste

### For potatoes

1 cup mixed marble potatoes (or any baby potato)

1 sprig rosemary

Salt, to taste

Olive oil

## DIRECTIONS

Combine all marinade ingredients and marinate steak for two days (or at least three hours). One hour before serving, combine all salad ingredients. Thirty minutes before serving, boil potatoes with salt and whole rosemary sprig until tender. Drain and remove rosemary, lightly crush, then crisp in olive oil for 5 minutes. Grill steak to medium-rare. Assemble all on a plate. Serves 1.

## chef tip

To ensure proper meat prep, Chef Karp recommends making sure the fire on the grill is not too hot (grill the steak over moderate heat). Let the meat rest five minutes before serving.



## MEET THE TRIATHLETE-CHEF

A life-long chef, Matt Karp opened his own restaurant, Plates, more than 10 years ago to combine his passion for cooking with the ability to control his schedule. "I wanted to be able to come and go when I want and raise my kids and find time to train," he says. "I could never be a triathlete if I were working for someone else." The restaurant, in the New York City suburb of Larchmont, is a hybrid of fine dining (lobster, halibut, locally sourced meats) and "hipster cooking" (barbecue, homemade kimchi, homemade pastrami). Karp attended Le Cordon Bleu in Paris and worked around the world under several famous chefs. It was the pressure of the kitchen that drove him into triathlon. Karp's friend watched the famous Julie Moss Kona crawl on TV in 1982, started racing triathlon because of it, then encouraged his whole group of friends (including Karp) to take up triathlon. He's been racing for almost a decade and has done five Ironmans. His three daughters are his biggest fans, and Karp and his friends all bring their families to big races for vacations. He plans to focus on racing only half-Ironmans so he can spend more time with his family. "My goal is just to have a well-balanced life," he says. —BETHANY LEACH MAVIS

■ ARE YOU A TRIATHLETE WHO'S ALSO A CHEF? EMAIL [FUEL@COMPETITORGROUP.COM](mailto:FUEL@COMPETITORGROUP.COM) AND YOU COULD BE FEATURED ON THIS PAGE.

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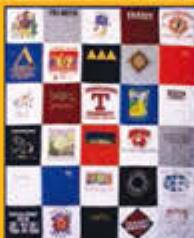
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# PODUM

recent notable moments  
IN THE WORLD OF MULTISPORT

FIRST

## GWEN-ZONE



**The American women do it again!** Gwen Jorgensen, Katie Zaferes and Sarah True owned the podium for their second sweep at the ITU World Triathlon Series London race.

SECOND

**Spotify's new running feature** will use your pace (from your phone's accelerometer) and listening history to match music to your workout.



THIRD



Attention **cycling video game nerds!** Zwift, which allows you to virtually ride courses against anyone with a trainer, is now open to everyone.

PENALTY TENT

The federal government deemed **Ironman's lottery program** (in which 100 lucky winners get a Kona slot) illegal, forcing Ironman to pay \$2.7 million to the government and reformat the program. Ironman CEO Andrew Messick admitted no wrongdoing on his company's part and said he was working through various possible scenarios for a Kona lottery moving forward.

**Matt who?** A relatively unknown pro, Matt Hanson of Iowa, captured the national Ironman title (and an automatic Kona start) in front of top pros at Ironman Texas.



**Boardman Bikes** had two **UK-themed Elite Air 9.8 frames** hand painted in front of the home crowd in London for the Brownlee brothers' ITU race.

**This sprint.** Was ridiculous. Watch the video from London at [Triathlete.com/londonsprint](http://Triathlete.com/londonsprint).



**Volunteering at Ironman races is a family affair** for legendary finish line announcer Mike Reilly and his family.



**Poppin' bottles:** **Ironman adds the champagne celebration** to its regional championship races.



When in Rome (or Paris or San Francisco or 10 other cities), find the best coffee stops and ride and run routes from locals with new **Strava Local City Guides**.

We're coming (back) to America: The **2017 Ironman 70.3 world champs will come back to the U.S.**; pros will race on a separate day.

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